



Non-possessive person in the nominal domain



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This thesis provides an investigation of non-possessive nominal person from a crosslinguistic perspective, i.e. variation in the way that the grammatical person of nominal expressions is marked across languages. The most prominent construction of this type are adnominal pronoun constructions (APCs) of the *we linguists* type.

The first part of the thesis provides a survey of expressions of nominal person in a sample of 92 languages from 44 genera, to my knowledge the first larger scale overview of its kind. I review the observable crosslinguistic variation with respect to word order, the presence or absence of definite articles, the possibility of the co-occurrence of demonstratives with pronouns and with respect to restrictions on person-number combinations in expressions of nominal person.

The second part examines the applicability of the classical pronominal determiner analysis (Abney 1987, Postal 1969) to the data collected in the survey, in particular with respect to word order, the co-occurrence of adnominal pronouns with articles and the person-number restrictions on expressions of nominal person. I discuss alternatives and amendments to the pronominal determiner analysis for problematic data, one important outcome being that nominal person is not universally encoded in the same position as definiteness.

In the third part, I review the so-called unagreement phenomenon as a case of non-overt nominal person marking and discuss the interaction of person with other deictic features in the nominal domain: the possibility of demonstrative constructions to control non-third person agreement in a few languages as well as personal pronoun-demonstrative constructions (PPDCs) involving demonstratives co-occurring with personal pronouns in some languages. The existence of the latter constructions suggests that person is not universally encoded in the same syntactic position as demonstratives.

The overall picture emerging is that there is crosslinguistic variation in the locus of person in the extended nominal projection and the types of features that are encoded on the same head as person, although there appears to be a universal tendency for person to be in a relatively high position.

Für mein Brüderchen

and

για την Ελεάνα

Declaration

I hereby declare that except where specific reference is made to the work of others, the contents of this dissertation are original and have not been submitted in whole or in part for consideration for any other degree or qualification in this, or any other University. This dissertation is the result of my own work and includes nothing which is the outcome of work done in collaboration, except where specifically indicated in the text. This dissertation contains less than 80,000 words including footnotes and appendices.

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Abbreviations and glosses

The glosses below are used in addition to the standard usage defined in the Leipzig Glossing Rules.

Abbreviations/Acronyms

ALA accounts	actual lack of agreement accounts (section 6.2.1)
APC	adnominal pronoun construction
BCMS	Bosnian-Croatian-Montenegrin-Serbian (a.k.a. Serbocroatian)
C-I system	conceptual-intentional system
dAPC	APC with mandatory definite marker
DM	Distributed Morphology
FOFC	Final-Over-Final-Constraint (cf. Biberauer et al. 2008, 2014a a.o.)
IE	Indoeuropean (language family)
LF	Logical Form
p.c.	personal communication
PDD	psychologically distal demonstrative (Johannessen 2008)
PF	Phonological Form
PNG	person-number-gender marker, see chapter 2 section 2.3.4
PPDC	personal pronoun-demonstrative construction
S-M system	sensory-motor system
TAP	Timor-Alor-Pantar (language family)

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TNG	Trans-New-Guinea (language family)
VI	Vocabulary item
xnP	extended nominal projection
Yim-Yal-Yid.	Yimidhirr-Yalanji-Yidinic (Pama-Nyungan)

Glosses

:pt	“potent” case ending (Kuku Yalanji)
ADDR	addressee
A	agent-like argument of canonical transitive verb
ANAPH	anaphoric
ANT	anterior
AOR	aurist
AUTH	author
C	common gender
cg	common gender
COMPEL	compellative (Khoekhoe)
CONJ	conjunction
DEICT	deictic (Koromfe, Rennison 1997)
DISJP	disjunctive pronoun (free word form, Rennison 1997)
DLN	delineator (Fore, Scott 1978)
DYNAM	dynamic (Abkhaz)
EFOC	focus marker from <i>heo</i> paradigm (Lavukaleve, Terrill 2003)
FM	father’s mother (Kuku Yalanji, Patz 2002)
FPAST	far past (Usan, Reesink 1987)
G1	gender class 1 (Supyire, Carlson 1994)

HABIT	habitual
HUM	human
INCH	inchoative
INCOMPL	incompletive aspect (Nigerian Pidgin, Faraclas 1996)
INDEF.OBJ	indefinite object conjugation (Hungarian, Kenesei et al. 1998)
INFL	inflection (Wari', Everett & Kern 1997)
LDA	locative-directional-ablative (Vaeakau-Taumako, Næss & Hovdhaugen 2011)
LIG	ligature (Obata 2003)
LNK	adnominal linker morpheme
MERG	merged (Pitjantjatjara, Bowe 1990)
MOD	demonstrative modifier from <i>hoia</i> paradigm (Lavukaleve, Terrill 2003)
NCL	noun class (e.g. in Bantu)
NFIN	non-final (Sawila, Kratochvíl 2014)
N-FUT	non-future
NONF	non-feminine
NPST	non-past
NTRL	neutral distance demonstrative (Lavukaleve, Terrill 2003)
PCO	perfective converb (Kambaata, Treis 2008)
PERS	personal article
PIV	pivotal marker (Yagaria, Renck 1975)
PLS	plural subject agreement (Kuku Yalanji, Patz 2002)
PLU	plural form of the article in Kwaio (Keesing 1985)
PLZ	personaliser (Kamano, Payne & Drew 1970/2009)
PN	demonstrative pronoun from <i>foia</i> paradigm (Lavukaleve, Terrill 2003)

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PREV	preverb (Abkhaz, Hewitt 1989)
PRO	oblique pro-form (Vaeakau-Taumako, Næss & Hovdhaugen 2011)
PROXART	proximate/inclusive article (Basque)
PSNV	presentative verb suffix (Lavukaleve, Terrill 2003)
PURP	purposive verb suffix (Lavukaleve, Terrill 2003)
PREV	preverb (Georgian)
REAL	realis
RECPST	recent past (e.g. Khoekhoe)
REP	reported speech particle (Pitjantjatjara, Bowe 1990)
RP/P	realis past/present (Wari', Everett & Kern 1997)
SM	soft mutation (Welsh)
SPEC	specific
SRC	source (Imonda, Seiler 1985)
SUCC	successive verb suffix (Lavukaleve, Terrill 2003)
SUPL	superlative
TAM	Tense-aspect-mood marker
TODPST	today's past (Amele, Roberts 1987)
TRN	transitivising suffix

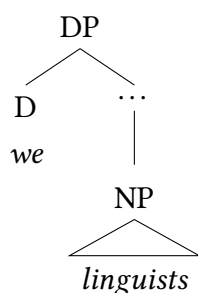
Chapter 1

Introduction

The topic of this thesis is non-possessive person in the nominal domain, or nominal person. By this, I mean the grammatical person of nominal phrases which anchors their denotation with respect to speech act participants, either to the author of an utterance (“first person”), its addressee (“second person”) or identifies it as not involving any speech act participant (“third person”).

Probably the most prominent example of nominal person are adnominal pronoun constructions (APCs) like English *we linguists*. The so-called pronominal determiner analysis, based on Postal’s (1969) influential work on these constructions, treats the pronominal part of these APCs as a determiner on par with the definite article. On this approach, adnominal pronouns and by extension the person features they encode form part of the structure of the domain of the full noun, the extended nominal projection (xnP), as sketched in (1). The pronominal determiner analysis is further discussed in section 1.2.

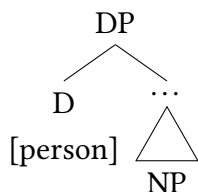
(1)



Elaborating on this association between the determiner position and person marking, the role of person for definiteness and other discourse effects has been addressed by several authors (Bárány 2015, Lyons 1999, Richards 2008) and it has been argued that the main function of the D head is the syntactic representation of person (Bernstein 2008b, Longobardi 2008), implying a structure like (2).

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(2)



Assigning a central syntactic role to person features in the nominal domain raises questions about the crosslinguistic distribution of such structures. APCs as the prototypical instance of nominal person have been investigated in a few languages to varying degrees. Apart from English, there has been work, for example, on Basque (Artiagoitia 2012), German (Lawrenz 1993, Rauh 2003, Roehrs 2005), Italian (Cardinaletti 1994), Japanese (Furuya 2008, Inokuma 2009, Noguchi 1997) and Romanian (Cornilescu & Nicolae 2014). However, comparison has typically been restricted to English and occasionally one or two other languages. To my knowledge, Pesetsky (1978) with comments on 10 languages and Choi (2014b) with discussion of 11 languages currently represent the typologically most extensive studies of APCs from a generative perspective. Louagie & Verstraete (2015) provide a detailed typological investigation of adnominal pronouns in 75 Australian languages as potential sources for the grammaticalisation of determiners, but the goals and domain of their study, which focuses on adnominal third person pronouns only, are different from those of the present work.

This thesis aims to contribute to the research on person in the nominal domain by providing a crosslinguistic overview of the range of syntactic variation of non-possessive nominal person, in particular APCs, based on a survey of 92 languages from 44 genera. I extract a number of crosslinguistic generalisations regarding the interactions of word order properties of APCs on the one hand and adpositions and adnominal demonstratives on the other hand. Moreover, certain markedness patterns in the range of available person-number combinations are described for APCs and comparable constructions. While a systematic classification of languages necessarily makes use of theoretical assumptions, I have attempted to keep this discussion as theory-independent as possible to facilitate accessibility for researchers from various theoretical backgrounds.

The remainder of the thesis discusses these data from a theoretical background. Taking a somewhat conservative approach, I take the pronominal determiner analysis as the basis of discussion and examine whether it can account for the observable patterns. Where it cannot, extensions or alternatives to the pronominal determiner analysis are proposed, suggesting that the location of person features in the structure of *x*nPs varies crosslinguistically in several respects. This includes not only their ordering relative to the head noun of an APC, but also the question of whether they share a syntactic position with other features like definiteness or demonstrativity, i.e. the features characterising definite articles and demonstratives. For

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Although the argumental use of English constructions like (4a) may be marginally available at least in the singular (5a), the pronoun does not express the grammatical person of the argument as indicated by the mandatory third person agreement. The same consideration applies to possibly related expressions like *the real me*, which can also not control first person agreement. I suspect that the apparent pronouns in these contexts are in a nominal position (Bernstein 2008a; Siewierska 2004: 10, fn. 8).²

- (5) a. Poor me has/*have lost the game.
b. The real me has/*have not shown itself/*myself.

In the literature, the term nominal person is sometimes used to refer to pronominal clitics or affixes indicating possession, see for example Siewierska's (1998) study of "nominal and verbal person marking", where nominal person markers are understood to be possessive markers. This phenomenon is illustrated by the pronominal clitic *o* in the bold noun phrase in (6) from Bilua, a Papuan language of the Solomon Islands. As the qualification *non-possessive* in the title indicates, I will not be concerned with nominal person in this sense here.

- (6) ... o=bazue=m=a **o=baerebaere** **poso.** [Bilua]
 3SG.M=tell=3PL.OBJ=PRS 3SG.M=friend PL.M
 '...he told his friends.' after Obata 2003: 99, (7.99)

The remainder of this introductory chapter is structured as follows. In section 1.1 I sketch the theoretical framework of Distributed Morphology that is assumed throughout the thesis. Section 1.2 presents the pronominal determiner analysis for English-type adnominal pronoun constructions, which provides a comparative basis for the structures encountered in later chapters. The introduction concludes with a brief overview of the remaining chapters in section 1.3.

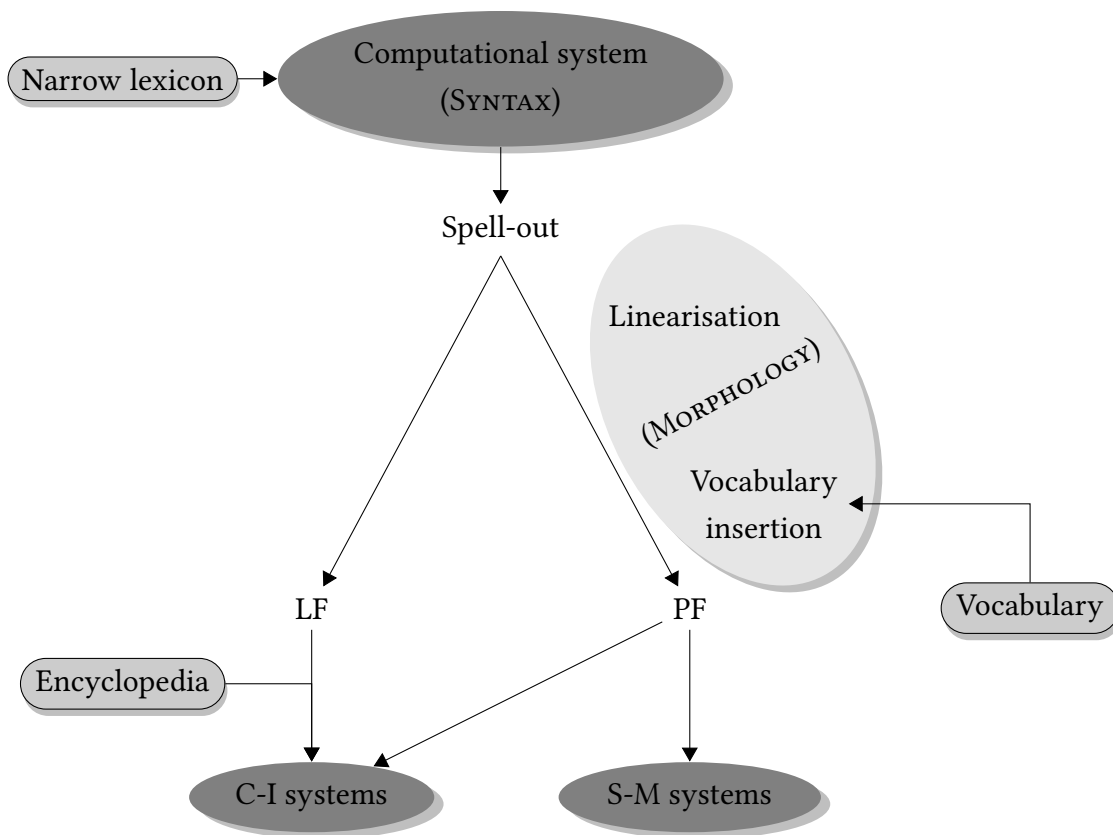
1.1 Distributed Morphology

The framework adopted in this thesis is Distributed Morphology (Bobaljik to appear, Embick 2010, Halle & Marantz 1993, Harley & Noyer 1999, Siddiqi 2010), henceforth DM. DM is a version of what has come to be known as the Minimalist Program (Chomsky 1995, 2000, 2001 among others). Like most minimalist theories, DM employs the classical Y-model of grammar consisting of the computational system (syntax) which generates hierarchical structures, the conceptual-intentional (C-I) systems concerned with meaning in the wider sense

²I leave open whether they are derived from the homonymous pronouns or if this is an instance of functional morphemes being merged in root positions, see below and particularly De Belder (2011).

and the sensory-motor (S-M) systems responsible for the externalisation of structure. The computational system provides the input to both other systems. Insofar as these systems place different requirements on their input, the syntactic structure is assumed to be sent off to two distinct interface levels, a process commonly called *spell-out*. LF (Logical Form) interfaces with the C-I systems and PF (Phonological Form) interfaces with the S-M systems. The version of the Y-model of grammar commonly assumed in the DM framework is sketched in (7), drawing on Harley & Noyer (1999: 3, (1)) and De Belder (2011: 24, (5)).³

(7) A sketch of the DM architecture of grammar



Classical “lexicalist” theories posit a lexicon that not only stores lexical items as the basic building blocks of syntax (consisting of sets of syntactic, phonological, semantic and potentially encyclopedic information), but also contains a combinatory system to form complex words, morphology, which then feed into syntax. On this view, there are two distinct generative systems in the grammar: syntax for sentence structure and the lexicon/morphology for word structure.⁴ DM, in contrast, assumes only one structure building component, syntax,

³The connection from PF to the C-I system is necessary to account for idioms.

⁴It is possible to distinguish between “strong” and “weak” lexicalist approaches. While the former assign all word formation to the lexicon, the latter take derivation to happen in the lexicon but assign inflection to the syntax.

which constructs sentences as well as complex words and distributes the functions classically assigned to the morphological component across the grammar.

DM is a realisational theory of morphology insofar as the basic elements the syntax operates on are morphemes consisting of abstract feature bundles without phonological information, in contrast to the classical view of the morpheme as directly encoding sound-meaning correspondences. The copy of the generated hierarchical structure is sent to PF upon spell-out and subsequently undergoes at least linearisation followed by a process providing abstract feature bundles with phonological exponence. The classical lexicon as the storage of sets of combined syntactic, phonological and semantic information is replaced with three separate lists of unpredictable information. These lists provide the basis for syntactic structure building (narrow lexicon), exponence/realisation of abstract structure (Vocabulary) and semantic interpretation (Encyclopedia), and are consequently associated with the computational system, PF and LF respectively. These lists are discussed in the next subsection.

1.1.1 Lists of unpredictable information in DM

The narrow lexicon contains the building blocks that the combinatory system operates on: functional heads, roots and categorising heads. Functional heads (or f-morphemes) consist of abstract feature bundles and do not have any phonological content, which is only supplied after spell out on the PF branch. Notice that the DM notion of morpheme contrasts with the traditional one insofar as morphemes do not (directly) form sound-meaning pairs. The realisational nature of the model allows for features that are interpreted at LF to remain without a phonological exponent (see below and subsection 1.1.2). The second type of building block are roots (or l-morphemes in Harley & Noyer 1999), corresponding to the “content” words of other theories. Roots are assumed to be category-neutral, and possibly lack any grammatical features (De Belder 2011). Instead of being encoded on lexical items, categorial properties like nominality or verbality are properties of grammatical structures. In DM, categorising heads like *n* and *v* are assumed to turn a structure into a nominal or verbal projection (see e.g. Embick & Marantz 2008, Marantz 1997, 2009, Panagiotidis 2011, 2015; for criticism of categorising heads cf. Borer 2005, 2013, De Belder 2011). Section 1.1.3 further discusses categorising heads and the corresponding categorial features.

The phonological content of terminal nodes, in particular f-morphemes, is supplied in a process called Vocabulary insertion or exponence.⁵ This process utilises the so-called Vo-

⁵I assume that Vocabulary insertion targets terminal nodes in line with the mainstream of DM research. See Embick (2012) for arguments in favour of terminal insertion. Cf. Radkevich (2010) for a modified system allowing insertion at non-terminal nodes in restricted contexts. Concerning roots, some recent implementations of DM assume that they enter the derivation with at least a minimal phonological matrix for identification, cf. for example Embick (2010: ch. 2, fn. 1) and also Borer (2005: 30) for a similar view in a different but related

cabulary, a list of Vocabulary items (VIs) providing rules of exponence for terminal nodes identified by their grammatical features. I exemplify how this works in subsection 1.1.2 below.

The Encyclopedia, finally, lists unpredictable meanings, not only for VIs but also non-compositional meanings of complex expressions like idioms.

1.1.2 Realisation of structure

Returning to the PF branch and the process of vocabulary insertion, it is important to bear in mind that its input consists of linearised strings of terminal nodes that are fully specified for their relevant features. The realisational nature of vocabulary insertion, however, allows for VIs to be *underspecified* for features represented in the input. That means that the description of a VI may lack features specified on the syntactic node it realises. There may be more than one VI in the Vocabulary compatible with the featural composition of a given terminal node. These compete for insertion and it is the VI with the most specific description fitting a given terminal node that wins the competition. What counts as most specific is typically taken to be decided by the Subset Principle, reproduced in (8).

(8) *Subset Principle*

The phonological exponent of a Vocabulary item is inserted into a morpheme in the terminal string if the item matches all or a subset of the grammatical features specified in the terminal morpheme. Insertion does not take place if the Vocabulary item contains features not present in the morpheme. Where several Vocabulary items meet the conditions for insertion, the item matching the greatest number of features specified in the terminal morpheme must be chosen. Halle 1997: 128, (7)

For cases that are not decided by (8), either extrinsic ordering of VIs (Halle & Marantz 1993) or a markedness hierarchy of the involved features (Noyer 1997) may be involved in determining the winner.

In addition to the (partial) feature matching required under the Subset Principle, VIs sometimes require a certain local context for insertion. This plays an important role in cases of contextually conditioned allomorphy, see e.g. Bobaljik (2000), Embick (2010) and chapters 5 and 6. Following Embick (2010), I assume that the local domain for such contexts is structurally and linearly determined. Hence, the triggering property (a feature or a phonological context) has to be represented on a linearly adjacent node inside the same spell-out domain.⁶ Spell-

framework. Notice that late insertion may be required for roots as well. This case is made particularly clear by suppletion phenomena that are not easily explained in terms of (morphophonological) readjustment rules such as the realisation of the root $\sqrt{\text{GOOD}}$ as *good* in the positive, but *best* in the superlative (see Bobaljik 2012 for details).

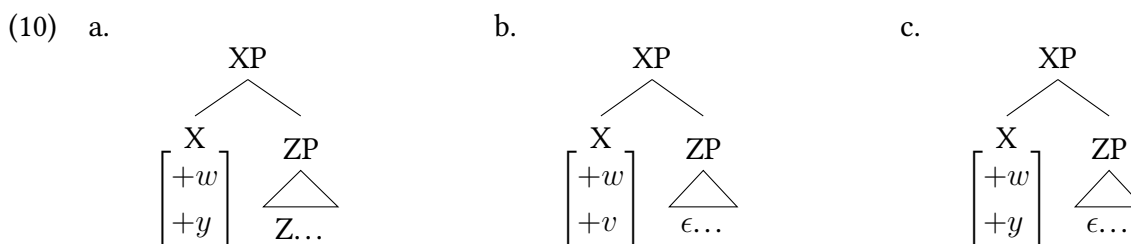
⁶See Arregi & Nevins (2012b) for the proposal that contextual restrictions may actually be more important for determining the winning VI than the number of featural matches.

Introduction

out domains are cyclically determined (see e.g. Bobaljik 2000, 2012, Embick 2010, Embick & Marantz 2008, Marantz 2009), parallel to common assumptions about the phasal nature of syntactic structure (Chomsky 2001). In Embick's (2010) \mathbb{C}_1 -LIN theory, which I adopt here, merger of a phase head in the sense of Chomsky (2001) triggers the spell-out of cyclic domains in its complement (see also chapter 5 section 5.1.1).

Underspecification of VIs in combination with late insertion accounts for the fact that there is no universal one-to-one mapping between sounds and meanings and provides an elegant means of capturing syncretisms. For illustration, consider the small toy Vocabulary in (9) and the structures in (10).

- (9) $X[+w] \leftrightarrow \alpha$
 $X[+v] \leftrightarrow \beta$
 $X[+w, +y] \leftrightarrow \gamma$
 $X[+w] \leftrightarrow \delta / _ \epsilon$



For the realisation of the terminal X in (10a), the VIs α and γ^7 are potential candidates because their feature specification is compatible with the input $X[+w, +y]$. Assuming that XP is the spell-out domain and Z does not contain ϵ , δ is not eligible for insertion since its contextual restriction is not met, while β is simply ruled out by the fact that the input node X does not contain a $[+v]$ feature. Due to (8), X is realised as γ because this VI represents the closest match to the input features.

In the structure in (10b), α , β and δ are eligible for insertion into X. All of the VIs share one relevant feature with the input node, and indeed if δ were not part of the Vocabulary, extrinsic ordering would have to decide between α and β . In this case, however, I assume that the additional contextual restriction of δ makes it more specific than the other two VIs so that X is realised as δ . This illustrates the possibility of underspecification, since the exponent for X, δ , does not refer to the feature $[+v]$ even though the feature is syntactically present.

Finally, (10c) illustrates competition between γ and δ . This case has, to my knowledge, not been much discussed in the literature (but cf. Arregi & Nevins 2012b). γ matches both features of the input and in that respect wins over δ , which matches only $[+w]$. However,

⁷I will informally refer to VIs by their exponent in what follows.

δ contains the additional contextual restriction requiring it to appear in the context of ϵ – which I take to be fulfilled in (10c). The question is then whether the specification introduced by a feature is of the same importance as that introduced by a contextual condition. If this is the case, as I will assume here, γ and δ are equally specific for purposes of Vocabulary insertion and extrinsic ordering has to decide between them. Given a convention that linear ordering of VIs represents their intrinsic ordering this would mean that X is spelled out as γ here. If, however, either feature specifications or contextual restrictions count more for the determination of specificity of a VI, either γ or δ would get to realise X without recourse to rule ordering.

While vocabulary insertion and linearisation are the only operations on the PF branch commonly taken to apply obligatorily in DM, several other operations can modify the syntactic structure after spell-out and before Vocabulary insertion. This includes at least two types of post-syntactic movement of complete nodes, Lowering and Local Dislocation (Embick 2007, Embick & Noyer 2001, Marantz 1988), as well as operations manipulating individual features, such as Fission (splitting the features of one node onto two separate nodes), Fusion (combining features from two separate nodes onto one node) and Impoverishment (removal of individual features from the input), see Arregi & Nevins (2012a), Halle (1997) and Harley & Noyer (1999) for further discussion.

1.1.3 Categorisation

As mentioned earlier, roots are category-neutral and categorial information is introduced syntactically by categorial heads such as *n* and *v*. I adopt Panagiotidis's (2015) approach to the nature of categorisers and this subsection briefly outlines the core assumptions.

The lack of unbound roots has led to the postulation of the assumption in (11).

(11) *Categorization assumption*

Roots cannot appear (cannot be pronounced or interpreted) without being *categorized*; they are categorized by merging syntactically with category-defining functional heads. If all category-defining heads are phase heads in Chomsky's (2001) sense—that is, if they are heads that initiate spell-out—the categorization assumption would follow from the general architecture of grammar (see [Marantz 2009]).

Embick & Marantz 2008: 6, (7)

Panagiotidis (2011, 2015) proposes to motivate this assumption by appealing to the impoverished interface properties of roots as in (12).

(12) (Free/uncategorized) roots are not readable by the Conceptual-Intentional/SEM systems.
Panagiotidis 2015: 95, (18)

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The *raison d'être* of categorial heads is then to make roots readable at LF. Additionally, categorisers may play an important role in allowing the syntax to manipulate roots if we assume that their radical lack of features would make them syntactically inert on their own (on both points cf. also Acquaviva 2009). They contribute an interpretational perspective to their complement along the lines of (13), where [N] and [V] correspond to the relevant interpretable feature on *n* and *v* respectively.

(13) *LF-interpretation of categorial features*

An [N] feature imposes a sortal perspective on the categorizer's complement at LF.

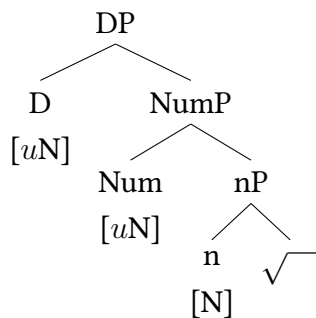
A [V] feature imposes an extending-into-time perspective on the categorizer's complement at LF. Panagiotidis 2015: 84, (7)

There is a wide consensus that there is a specific, "bi-unique" (Felix 1990) relationship between functional heads and a lexical category to the effect that functional heads "cluster" around a specific lexical head. For example, D is found only in nominal projections, while T is associated with verbal projections. This is reflected, e.g., in van Riemsdijk's (1999) *Categorial Identity Thesis* or in Grimshaw's (2005) influential extended projections, an item of terminology I am adopting here. Building on these earlier findings, Panagiotidis argues that categorising heads are the necessary core of an extended verbal or nominal projection because, in essence, they "are the only lexical heads" (Panagiotidis 2011: 366). In contrast, the presence of a root is optional (Panagiotidis 2015: 100). Panagiotidis proposes that the aforementioned bi-unique relationship results from the principle of *Categorial Deficiency*:

(14) *Categorial Deficiency*: functional elements bear the uninterpretable version of the categorial feature of the lexical head at the bottom of their projection line (cf. Panagiotidis 2002: ch. 5). Panagiotidis 2015: 117, (9)

The categorial coherence of an extended projection results from the need to value/check the uninterpretable categorial features of functional elements against an interpretable categorial feature, which can be found on a categorial head only as sketched in (15).

(15)



As a consequence, functional heads cannot appear outside the extended projection of a lexical category, i.e. without a lexical category at its core, neither on their own (16a) nor complemented by a bare root (16b).⁸ If they did, they would find no interpretable categorial feature to value/check their uninterpretable categorial feature, leading to a crash at the LF interface.

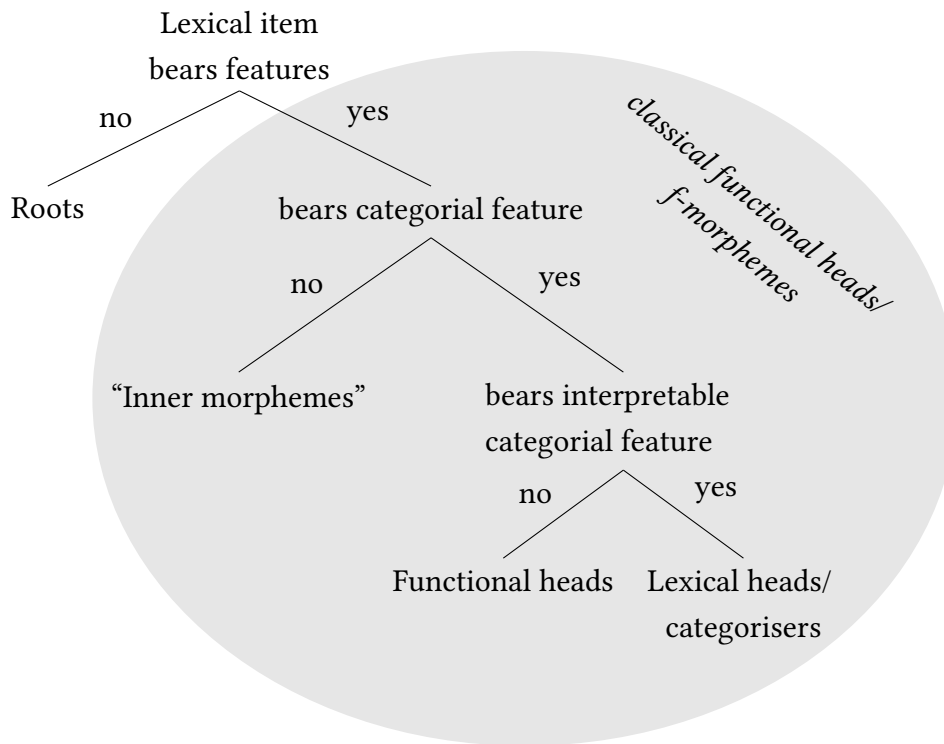


As suggested by the formulation of (14), Panagiotidis (2011, 2015) departs from the common practice within DM of treating categorising heads as functional heads, proposing instead that heads bearing interpretable categorial features are lexical heads and those with uninterpretable categorial features are functional (Panagiotidis 2015: 119). This terminological distinction between categorial heads and (other) functional heads aims to highlight the prominent role of categorial heads in the formation of extended projections. I adopt this perspective and the corresponding hypothesis that the narrow lexicon consists of three classes: acategorial roots, categorial/lexical heads and functional heads in the sense explicated. A potential fourth class are “inner morphemes” which Panagiotidis (2015: 124, fn. 12) exemplifies with low applicatives (Pylkkänen 2008), low causatives and particles. Their feature bundles lack (interpretable or uninterpretable) categorial features, allowing them to be merged inside the domain of categorial nodes.

It is important to stress that categorial heads may bear other grammatical (functional) features alongside the categorial feature, so classifying *n* as a lexical head in this sense does not prevent it from bearing gender features (e.g. Acquaviva 2009, Kramer 2009, Lowenstamm 2008). To clarify the terminological distinction consider the illustration in (17). Note that, strictly speaking, roots may be placed outside of the faculty of language in the narrow sense (FLN; Hauser et al. 2002) if one takes seriously the idea that they are radically featureless, require categorial heads in order to become manipulable by the computational system and, following Panagiotidis (2015), are optional as opposed to categorial heads.

⁸Notice that (16b) is also ruled out by the fact that the root would remain unreadable at LF, see (12).

(17) *Representation of assumed ontology of syntactic elements*



The main point of this illustration is that all classes below the first *yes* branch in (17) correspond to the classical notion of functional head insofar as they can bear functional features. This contrasts with the narrower notion of functional head located at the low end of the tree, which designates heads that bear an uninterpretable categorial feature. Unless indicated otherwise, the term functional head will be used in its wider sense below.

This concludes the overview of the basic framework adopted here. The following section discusses some core issues of nominal structure, in particular concerning the categorising head *n* and the pronominal determiner analysis of APCs.

1.2 English adnominal pronouns

This section outlines some basic assumptions regarding the structure of the nominal domain and adnominal pronouns in English. The next subsection outlines my basic assumptions about the structure of the *xnP* and the role of personal pronouns in it. Section 1.2.2 presents the pronominal determiner analysis against this background, while section 1.2.3 summarises a number of arguments against an alternative appositive analysis for English APCs.

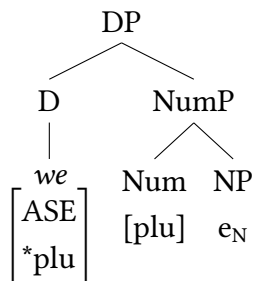
1.2.1 The structure of the *xnP* and English-type pronouns

There is a wide consensus in the literature that pronouns have internal structure which resembles that of noun phrases in general (e.g. Barbosa 2013, Cardinaletti & Starke 1999b, Déchaine & Wiltschko 2002, Neeleman & Szendrői 2007, Panagiotidis 2002, Ritter 1995), although there is, of course, variation in the specifics of the various proposals. Here, I sketch my basic assumptions regarding nominal structure and its relation to the structure of pronouns in English.

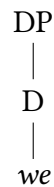
I assume that apart from the nominal core (traditionally called NP, in the present framework a categoriser *n* and a categoryless root), the *xnP* (minimally) consists of a Num projection encoding number (Ritter 1995, Wiltschko 2008) and the D projection encoding definiteness and crucially also person, based largely on the pronominal determiner analysis discussed below in section 1.2.2.

Following Panagiotidis (2002, 2003a,b), I take pronouns to essentially share this nominal structure. Panagiotidis proposes that a silent “empty noun” e_N forms the lexical core of pronouns as illustrated in (18), see also Elbourne (2005) for a similar proposal from a semantic perspective.⁹ Abney’s (1987) alternative analysis of pronouns as “intransitive determiners”, sketched in (19), implies unlikely behaviour for a functional head – all other functional heads “(ultimately) need a lexical complement” (Panagiotidis 2002: 13). Panagiotidis (2002: ch. 5.2) also notes that intransitive determiners are problematic from a semantic perspective because they would, depending on the analysis adopted for determiners, either represent unsaturated functions (Heim & Kratzer 1998: 52–53) or fail to receive a θ -role from a noun (Higginbotham 1985). Technically, the intransitive DP in (19) lacks a lexical, in this case nominal, core which can project an extended nominal projection. Due to the categorial deficiency of functional heads, see (14), the head D requires interpretable nominal feature in its complement domain as discussed in section 1.1.3. These considerations lead me to adopt Panagiotidis’ analysis.

(18) after Panagiotidis (2002: 35, (19a))



(19) Abney (1987: 180, (307a))

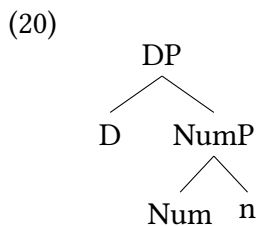


⁹ASE stands for Author of Speech Event following Halle (1997: 429), plu for plural and [*plu] indicates that the feature is uninterpretable and the result of agreement with the lower Num head.

Introduction

Panagiotidis (2002) presents e_N as a silent counterpart to contentless nouns like English *one*. Syntactically, he treats it as a lexical head of the category N, i.e. a regular lexical noun without an associated phonological matrix (or alternatively associated with a null phonological matrix, if that makes a difference).¹⁰

The characterisation of e_N as a silent empty noun requires some qualification within the present framework, where content words are constructed from acategorial roots instead of lexemes that are lexically categorised as nouns or verbs. Plausibly, e_N corresponds to a silent categorising head n as in (20), in line with Panagiotidis (2015: 99).

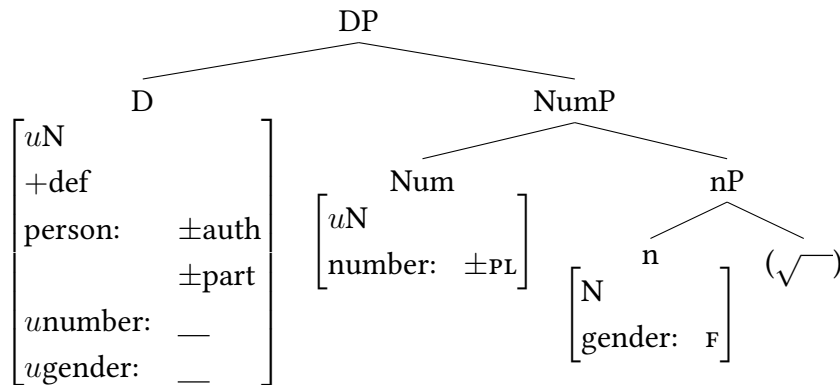


Recall that the presence of a root is optional (Panagiotidis 2015: 100) and in the present case it would be superfluous. Consider that one of the crucial features of what Panagiotidis (2003b: 415) calls “grammatical nouns” (comprising words like *one*, *thing* etc. in addition to e_N) is their relative lack of conceptual content. A common characterisation of the role of roots, on the other hand, is that they “add conceptual meaning to the structures built up by syntax” (De Belder 2011: 31). Alternatively, Acquaviva (2009: 17) makes the stronger claim that roots carry no meaning themselves, but that “they are just differential indices that fix the identity of larger constructs, which constitute the minimal units for semantic interpretation.” On either approach to the ‘meaning’ of roots, it is superfluous to assume some kind of silent root at the core of e_N with the only property of not contributing any conceptual meaning.

To conclude, I follow Panagiotidis (2015: 99) in assuming that e_N is a bare categorising functional head n . Gender features, which Panagiotidis (2002, 2003b) assigned to e_N , have also widely been associated with the n head (cf. Acquaviva 2009, Kramer 2009, 2012, 2014, Lecarme 2002, Lowenstamm 2008). The basic structure of the xnP that I assume for a language like English is sketched in (21). The categorising head n may merge with a categoryless root in the case of full nouns. Pronouns contain no root and the categoriser forms a minimal-maximal projection on its own. A Num head encodes number features, while person features and definiteness are encoded on D, which also agrees for number and gender with the remainder of the xnP (possibly in a feature sharing model as suggested by Danon 2010).

¹⁰Elbourne (2005: 124) independently makes a similar proposal with his phonologically null ONE with the semantics $[\lambda x : x \in D_e . x \in D_e]$.

(21)



The assumption that person features are located in the D head at least in English and similar languages raises questions about the nature and formal representation of those person features. I adopt the system of Nevins (2007, 2011) for the purpose of representing and analysing nominal person. The system is based on two binary features as defined in (22) interacting as sketched in (23) to produce a basic three person system.

(22) [-F] = ¬[+F]

- a. [+Auth] = the reference set contains the speaker
- b. [+Participant] = the reference set contains one of the discourse participants

Nevins 2007: 288, (43)

- (23)
- a. [+Auth,+Part] = 1st person
 - b. [-Auth,+Part] = 2nd person
 - c. [-Auth,-Part] = 3rd person
 - d. [+Auth,-Part] = logically impossible

Nevins 2007: 288, (44)

The distinction between inclusive and exclusive first person is captured by an optional unary feature [addr(esse)] which Nevins (2007) takes to be active in languages with clusivity. This is illustrated in (24).

- (24)
- a. [+Auth,+Part] = 1st person exclusive
 - b. [+Auth,+Part][addr] = 1st person exclusive
 - c. [-Auth,+Part][addr] = 2nd person
 - d. [-Auth,-Part] = 3rd person
 - e. [-Auth,-Part][addr] = logically impossible
 - f. [+Auth,-Part] = logically impossible

Nevins 2007: 305, (92)

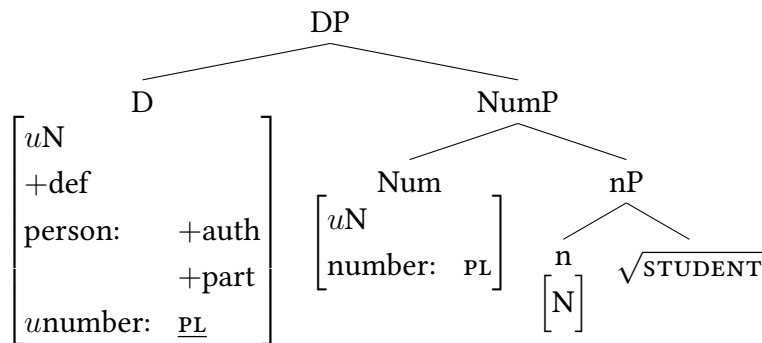
1.2.2 The pronominal determiner analysis

Adnominal pronouns in languages like English, German or Italian are in complementary distribution with definite articles as illustrated in (25). This insight provides the name for Postal’s (1969) classical pronominal determiner analysis, which treats the pronoun in these APCs as an instance of the definite article. Variants of this analysis have been argued for by Abney (1987), Déchaine & Wiltschko (2002), Lawrenz (1993), Longobardi (1994: 635f.), Lyons (1999), Panagiotidis (2002), Pesetsky (1978), Rauh (2003) and Roehrs (2005) among others.¹¹

- (25) we (*the) students [English]
 wir (*die) Studenten [German]
 noi (*gli) studenti [Standard Italian]

The *xnP* structure presented in the previous section incorporates the pronominal determiner analysis by locating person features alongside definiteness on the D head. The structure of an adnominal pronoun construction like *we students* is illustrated in (26). I leave open the question of whether the determiner is base generated in the D position, as is often assumed, or whether it moves there from a lower position as suggested by Roehrs (2005). I adopt this analysis for English-type APCs and will use it as the basis of comparison in part II of the thesis.

- (26) Structure of *we students*

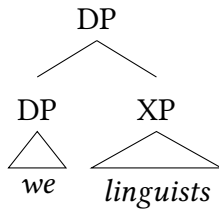


A competing analysis, sketched in 27, takes the lexical noun to be an apposition to the pronoun. Variants of this appositive analysis have been assumed, among others, by Ackema & Neeleman (2013), Cardinaletti (1994), Cardinaletti & Starke (1999b), Delorme & Dougherty (1972) and Olsen (1991). As sketched in (27), an APC consists of a pronominal DP to which a phrase containing the nominal part of the APC is adjoined.

¹¹I am not going to address some issues specific to English, such as the preference of many speakers for the accusative form of the pronoun (*us students*) or the restricted occurrence of apparent APCs with definite articles (*we the people*), but for an approach to the former issue see Parrott (2009). For a brief discussion of expressions like *them linguists* see chapter 2 section 2.6.1.

(27)

Roehrs 2005: 252, (3a)



As a third alternative analysis, Choi (2014a,b) argues that adnominal pronouns (and demonstratives) are merged in the specifier of a deictic dxP and attracted to SpecDP by a [+TH] feature to satisfy the TH-criterion (Campbell 1996, Panagiotidis 2000) provided in (28).

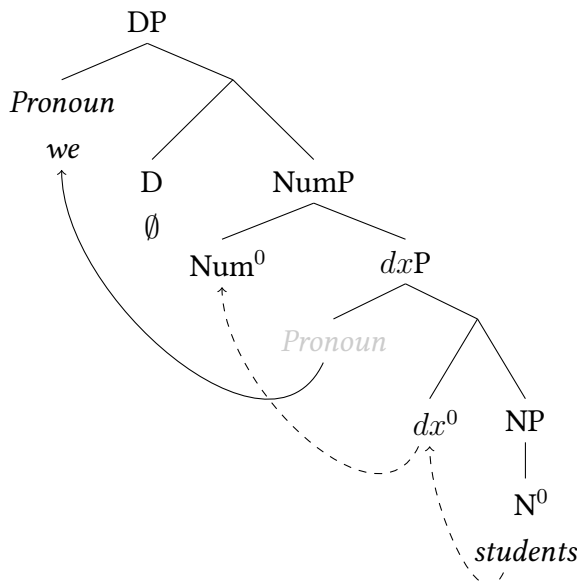
(28) *TH-Criterion:*

A [+TH] determiner has a [+TH] specifier, and a [+TH] operator specifies a [+TH] determiner (where [+TH] is defined to be ‘definite’, à la Campbell (1996)).

Choi 2014b: 114, (47)

This establishes an agreement relation between the moved pronoun or demonstrative and the attracting D head, allowing the valuation of the latter’s uninterpretable person features. The resulting structure is illustrated in (29).

(29) Analysis of pronominal determiners after Choi (2014b: 141, (3))



Problems with Choi’s approach are addressed in chapter 4 section 4.1 and in chapter 6 section 6.2.2.2. The next section presents a number of arguments against an appositive analysis of English APCs.

1.2.3 Against an appositive analysis

In order to substantiate the decision to adopt the pronominal determiner analysis here, this section summarises several arguments from the literature showing that APCs differ from appositions in various ways. I will start by discussing a series of differences between APCs and “loose” apposition, which seems to be the option most widely considered in the literature, before going on to provide some reasons to distinguish APCs from “close” appositions as well (for the distinction between two types of apposition see Burton-Roberts 1975 and Stavrou 1995). This section largely corresponds to Höhn (2016: 5.2.1 and 5.2.2).

1.2.3.1 No loose apposition

One difference between APCs and appositive constructions can be observed in the behaviour of pronominal objects of particle verbs, which have to precede the particle, cf. (30) after Pesetsky (1978: (15)). Pesetsky’s (1978) example (16), reproduced here in (31), shows that the same holds when the pronoun is accompanied by an apposition or a relative clause (a-c), but crucially not for the APC in (d), which behaves like a “regular” full DP in being able to follow the particle.

- (30) a. He looked us up in the phone book.
b. *He looked up us in the phone book.
- (31) a. *He looked up us, the local officers of the Elks.
b. *He looked up us, who were living in France then.
c. *He looked up us who sounded Kalmyk in the phone book.
d. He looked up us linguists in the phone book.

Moreover, the variation between the nominative and accusative case form of the first person plural pronoun mentioned in footnote 11 is restricted to APCs and not attested in appositive constructions, as shown in the following examples from Pesetsky 1978: 355, (17).

- (32) a. We, linguists from conviction, abhor computers.
b. *Us, linguists from conviction, abhor computers.
c. We linguists abhor a vacuum.
d. Us linguists abhor a vacuum.

A further point raised by Pesetsky (1978: 354, (12)) exploits a scope variability of appositions which is lacking in APCs. The *some of... others of...* construction relates two

non-overlapping subsets of a set, and requires the restrictors of both quantifiers to be identical. The example in (33a) is felicitous because the restrictor of both quantifiers is the same group containing the speaker, while the appositions attach high, at the quantifier level, expressing a salient property for each of the two subsets determined by the construction. The resulting reading is that of a ‘we’ group consisting of (at least) linguists and philosophers, with members of the former subgroup thinking that members of the latter are crazy. The APCs in (33b), on the other hand, do not allow that option. The nouns have to scope low, leading to two non-identical restrictors – a group of philosophers and another one of linguists – accounting for the lack of a coherent interpretation.

- (33) a. Some of us, linguists, think that others of us, philosophers, are crazy.
b. *Some of us linguists think that others of us philosophers are crazy.

Lawrenz (1993: ch. 6) produces several further arguments in favour of a pronominal determiner analysis. While her discussion is focused on German, several of her arguments can be easily transferred to English.

1. Reinforcers like *here* or *there* are allowed in the context of the definite article or of an adnominal pronoun, but they are ruled out in appositions consisting of an article-less, indefinite noun phrase:
they, the girls there and *we girls here* vs. **they, ∅ girls there* or **we, ∅ girls here*
2. The article obligatorily accompanying certain proper names may be replaced by an adnominal pronoun, but must not be dropped in cases of apposition:
The/you Wright brothers are brilliant vs. **∅ Wright brothers are brilliant* and *they, *(the) Wright brothers, ...*
3. Adverbials like *formerly* that are licensed in appositions are ruled out in the context of the definite article and in APCs:
you, formerly admirers of modern art, ... vs. *the/you (*formerly) admirers of modern art...*
4. Restrictive post-nominal modifiers are obligatorily located after the complete pronoun-noun complex of an APC, while they can intervene between a pronoun and an apposition, presumably because the apposition scopes over the pronoun + modifier expression (cf. Pesetsky’s (1978) argument from the *some of...*, *others of...* construction):
you rich boys with your fancy dresses vs. **you with your fancy dresses rich boys*; cf. *you with your fancy dresses, rich boys, ...*

Introduction

5. APCs are available in right-dislocated contexts where “loose apposition” constructions would be infelicitous:

Back then we had dreams, we simple folks vs. **Back then we had dreams, we, simple folks*

6. APCs lack a comma intonation. An expression in construction with a pronoun requires the comma intonation indicative of appositions if there is a morphosyntactic number mismatch:

**we father and son...* vs. *we, father and son,...*; but: *we fathers and sons*

Finally, the pronominal determiner analysis also seems to be in a better position to explain why APCs are incompatible with indefinite/quantified expressions. Consider the contrast in (34) where only an appositive structure, marked by a clear comma intonation and optionally accompanied by *that is*, licenses the quantified expression *some students from California* in (34a). In an APC like (34b) this is ruled out.

- (34) a. we, (that is) some students from California
b. *we some students from California

1.2.3.2 Differences between English APCs and close apposition

The above diagnostics focus on the distinction between APCs and loose appositions. Here, I turn to so-called close appositions like *the poet Burns*, which, in fact, seems to pattern with APCs in some respects – e.g. the final three diagnostics quoted from Lawrenz (1993) or the definiteness restriction of (34).

Nevertheless, there are good reasons to distinguish APCs from close apposition as well. Burton-Roberts (1975: 397) notes that close apposition has to involve a proper name (in fact, his analysis treats the first noun as a modifier of the proper name, parallel to *the ingenious Chomsky*). APCs, on the other hand, are not restricted in this way.

Even if one were to claim that the pronominal part of APCs took over the role of a proper noun for the purpose of that restriction, one would inevitably run into a further problem. While the pronominal element in APCs invariably comes first, the proper name comes last in the unmarked form of close apposition. While the latter allows an inverted variant with some form of contrastive interpretation (*Burns the poet*; cf. Burton-Roberts 1975: 402), APCs arguably only allow one order, as evidenced by the ungrammaticality of **linguists you*.

Finally, Roehrs (2005) notes that adjectival modifiers cannot intervene between the first and the second noun in close appositions, cf. (35). On the other hand, in APCs they need to interfere in the pronoun-noun complex, as illustrated in (36).

- (35) a. the famous poet Burns, the interesting number 5, the famous Brothers Grimm
b. *the poet skillful Burns, *the number interesting 5, *the brothers famous Grimm
- (36) a. *famous you poets, *clever we/us kids, *hazardous you social-networking junkies
b. you famous poets, we/us clever kids, you hazardous social-networking junkies

On the basis of these considerations the pronominal determiner analysis emerges as the more successful analysis of English-type APCs. One of the purposes of the remainder of this thesis is to consider how it fares with a wider range of languages and what modifications or alternatives may be required to account for the range of variation in APCs.

1.3 Outline

This thesis is divided into three parts. Part I consists of chapter 2 only, which presents the results of a survey of the expression of non-possessive nominal person in 92 languages. This yields several crosslinguistic generalisations and provides the empirical basis for the remainder of the thesis. As noted before, this part aims to be accessible independently of the theoretical framework assumed here.

Part II discusses some theoretical aspects of the surveyed data against the background of the classical pronominal determiner analysis of adnominal pronouns. In chapter 3, the focus is on the analysis of the various word order patterns and their compatibility with the Final-Over-Final Constraint (Biberauer et al. 2014a). I address various structures that are not compatible with the pronominal determiner hypothesis as is and sketch potential analyses. Questions arising for the pronominal determiner analysis from the lack or presence of articles are the topic of chapter 4. This concerns languages with definite articles in APCs (=dAPCs) on the one hand and, on the other hand, languages that lack definite articles altogether. Finally, chapter 5 deals with the person and number restrictions found in APCs.

Part III addresses two phenomena that provide further insights into the co-occurrence of person features with other features in the nominal domain. Based on the structural proposal made in chapter 4 regarding languages with dAPCs, chapter 6 develops an analysis of unagreement, a phenomenon where apparently third person definite plural DP subjects can control non-third person verbal agreement. The proposed analysis holds that in unagreement constructions person features are encoded in a position distinct from definiteness, but demonstrative features are encoded on the same head as person. The chapter also addresses some problematic data and provides arguments against assimilating unagreement to Collins & Postal's (2012) imposter phenomenon. The interaction of person features and (other) deictic features, notably on demonstratives, is investigated in more detail in chapter 7.

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The chapter deals with the phenomenon of personal pronoun-demonstrative constructions (PPDCs), i.e. constructions where personal pronouns and demonstratives are not in complementary distribution, suggesting that they do not form one distributional class in these cases. Furthermore, the chapter also discusses data suggesting a relationship between person features and demonstrative features. Even though most of the observed connections may be due to pragmatic principles, the observable correlations support the idea that languages may employ person features in the setup of demonstratives (Harbour 2016).

Chapter 8 concludes the thesis with a summary of its findings, ending with some speculation on the parametric formalisation of the observed variation.

Part I

Crosslinguistic data

Chapter 2

A survey of non-possessive nominal person marking

The aim of this chapter is to provide a wider crosslinguistic survey of phenomena of nominal person marking, and particularly APCs, by bringing together data from published grammars, complemented by some elicited data. Keeping in mind the limitations of the current survey, several tendencies can be observed in the data. The main findings concerning the word order of APCs are as follows.

1. Adnominal pronouns can be found both pre- and postnominally, with the prenominal option being the far more common one in the sample (63:12 languages).
2. There is a correlation between the position of adnominal pronouns and demonstratives relative to the head noun. Languages with prenominal demonstratives tend to have prenominal APCs and languages with postnominal APCs have a strong tendency to use postnominal demonstratives.
3. Languages with prenominal APCs do not display a preferred position for adpositions. On the other hand, postnominal APCs only occur in languages with postpositions in the present sample.

Regarding person and number restrictions for APCs, the English-type pattern of restricting APCs to first and second person plural turns out to be well attested, but clearly not universal. The current data suggest the two tentative generalisations provided in (37) and (38).

(37) If a language has third person APCs, it has first and second person APCs.

(38) If a language has singular APCs, it also has non-singular APCs.

The chapter is structured as follows. In section 2.1, I present the database and some methodological and analytical issues that arose in collecting the data. Section 2.2 comments on languages without APCs, while section 2.3 discusses the word order tendencies summarised above in more detail. Instances of another type of person marking, namely an enclitic or affixal morpheme at the periphery of the nominal domain, will be reviewed in section 2.3.4. The distribution of articles and demonstrative pronouns with respect to APCs is discussed in sections 2.4 and 2.5 respectively. Section 2.6 is concerned with crosslinguistic variation in the permissible person and number specifications in APCs, providing the empirical basis for the generalisations above. Finally, section 2.7 summarises the findings of this chapter.

2.1 The database

2.1.1 Methodological issues

Non-possessive person marking, including the phenomenon of APCs, is rarely discussed in grammatical descriptions. A notable exception are grammars in the *Routledge Descriptive Grammars* series, which follow Comrie & Smith's (1977) standardised questionnaire. This includes a question about the availability of "Pronoun-Noun Constructions" (corresponding to their question 2.1.2.1.17.):

(39) Are constructions of the type pronoun-noun possible where both elements have the same reference, e.g. 'we firemen...'. If so, is this possible with all pronouns or only with some. List those forms for which it is impossible. Comrie & Smith 1977: 40f.

Not all grammars answer this question in detail and for Rapanui (Du Feu 1996), it was skipped altogether, but grammars from that series are still among the best sources of information about the absence of APCs in a language.

The main criterion for the inclusion of further grammars in the sample was the presence of at least some reference to APCs or related phenomena. Consequently, the language sample used here is not typologically balanced by design, since its main purpose is to provide an overview of the crosslinguistically attested APC structures described in the literature. The nature of the sample obviously restricts the possibility of making universal or strong statistical claims on the basis of the present survey, which should be kept in mind when considering the discussion below.

I have argued in chapter 1 that APCs should be distinguished from apposition, at least in languages like English and German. Given the often rather subtle and language-specific nature of the diagnostics used to make that distinction in languages like English, this issue

A survey of non-possessive nominal person marking

- (41) Dingar-angka yawu dama-ny yinba-bu.
 man-ERG:pt(A) stingray.ABS(O) spear-PST 3-prong spear-INST
 ‘The man speared the stingray with a three-pronged spear.’³ Patz 2002: 130, (242)

2.1.2 Overview

This survey is based on a total of 92 languages, with data mostly drawn from published grammars and in a smaller number of cases elicited from native-speaker consultants. A list of these languages is given in Table 2.1, including their genetic affiliation. They are grouped by linguistic family or common terms of convenience. Where published grammars were used as a significant source, the relevant references are indicated in the third column. For ease of identification, grammars based on Comrie & Smith’s (1977) questionnaire are marked by (C).⁴ A sketch of the location of the languages for which map coordinates were available is provided in Figure 2.1.⁵

Table 2.1: List of sampled languages

Language	Family	Main source(s)
<i>Papuan languages (19)</i>		
Imonda	Border, Waris	Seiler 1985
Bilua	Central Solomons	Obata 2003
Lavukaleve	Central Solomons	Terrill 2003
Manambu	Sepik, Ndu	Aikhenvald 2008
Awtuw	Sepik, Ram	Feldman 1986
Alamblak	Sepik, Sepik Hill	Bruce 1984
Fore	TNG, Gorokan	Scott 1978
Hua	TNG, Gorokan	Haiman 1980
Yagaria (<i>Move</i> dialect)	TNG, Gorokan	Renck 1975
Amele	TNG, Madang, Gum	(C) Roberts 1987

³Concerning the “potent” case ending, Patz (2002: 128) notes that “[c]ategory 2 nouns in A function take ‘potent’ inflection if credited with responsibility for their action and ‘neutral’ inflection if not.”

⁴The Trans-New-Guinea family is abbreviated TNG, its sub-group Timor-Alor-Pantar TAP and Indoeuropean IE.

⁵Produced using R (R Core Team 2013) and the mapdata package (Becker et al. 2016). Language coordinates based on glottolog 2.7 (Hammarström et al. 2016) for most languages, on WALS (Dryer & Haspelmath 2013) for German and Greek. Coordinates correspond to Xanthi/Greece for Pomak, to Verbicaro/Italy for northern Calabrese and Bova Marina/Italy for southern Calabrese and Calabrian Greek. The remaining languages were omitted due to missing coordinates. Thanks to András Bárány and Stavros Skopeteas for providing their respective R code as a basis.

Table 2.1: (continued)

Language	Family	Main source(s)
Kobon	TNG, Madang, Kalam	(C) Davies 1989
Usan	TNG, Madang, Numugenan	Reesink 1987
Adang	TNG, TAP, Alor	Robinson & Haan 2014
Kamang	TNG, TAP, Alor	Schapper 2014
Sawila	TNG, TAP, Alor	Kratochvíl 2014
Wersing	TNG, TAP, Alor	Schapper & Hendery 2014
Kaera	TNG, TAP, Pantar	Klamer 2014
Teiwa	TNG, TAP, Pantar	Klamer 2010
Western Pantar	TNG, TAP, Pantar	Holton 2014
<i>Australian languages (7)</i>		
Mangarayi	Gunwingguan	(C) Merlan 1989
Diyari	Pama-Nyungan, Kama	Austin 1981
Warlpiri	Pama-Nyungan, Ngarrkic	Hale 1973, Lyons 1999, Reece 1970, Simpson 1991
Pitjantjatjara	Pama-Nyungan, Wati	Bowe 1990
Guugu Yimidhirr	Pama-Nyungan, Yimidhirr-Yalanji-Yidinic	Haviland 1979
Kuku Yalanji	Pama-Nyungan, Yimidhirr-Yalanji-Yidinic	Patz 2002
Kayardild	Tangkic	Evans 1995
<i>Indo-European languages (27)</i>		
Welsh	IE, Celtic, Brythonic	
Danish	IE, Germanic, North	Johannessen 2008, Julien 2005
Icelandic	IE, Germanic, North	Johannessen 2008, Julien 2005
Norwegian	IE, Germanic, North	Johannessen 2008, Julien 2005
Swedish	IE, Germanic, North	Johannessen 2008, Julien 2005
Dutch	IE, Germanic, West	
English	IE, Germanic, West	

A survey of non-possessive nominal person marking

Table 2.1: (continued)

Language	Family	Main source(s)
German	IE, Germanic, West	
Std. Mod. Greek	IE, Hellenic	
Calabrian Greek	IE, Hellenic	Höhn et al. to appear
Kashmiri	IE, Indo-Aryan	(C) Wali & Koul 1997
Marathi	IE, Indo-Aryan	(C) Pandharipande 1997
Punjabi	IE, Indo-Aryan	(C) Bhatia 1993
Persian	IE, Indo-Iranian	(C) Mahootian 1997
Aromanian	IE, Romance, East	Katsanis & Ntinias 1990
Romanian	IE, Romance, East	(C) Mallinson 1986, Cornilescu & Nicolae (2014)
Catalan	IE, Romance, Iberian	(C) Hualde 1992
Galician	IE, Romance, Iberian	Álvarez et al. 1986
(Europ.) Portuguese	IE, Romance, Iberian	
Spanish	IE, Romance, Iberian	de Bruyne 1995
Italian	IE, Romance, Italo	
Northern Calabrese	IE, Romance, Italo	Höhn et al. 2016, to appear
Southern Calabrese	IE, Romance, Italo	Höhn et al. 2016, to appear
Russian	IE, Slavic, East	
Bulgarian	IE, Slavic, South	
Pomak	IE, Slavic, South	Papadimitriou 2008
Polish	IE, Slavic, West	
<i>Afroasiatic languages (6)</i>		
Hausa	Afroasiatic, Chadic	Jaggar 2001, Newman 2000
Mupun	Afroasiatic, Chadic	Frajzyngier 1993
Kambaata	Afroasiatic, Cushitic	Treis 2008
Cairene Egypt. Arabic	Afroasiatic, Semitic	(C) Gary & Gamal-Eldin 1982
Gulf Arabic	Afroasiatic, Semitic	(C) Holes 1990
Maltese	Afroasiatic, Semitic	(C) Borg & Azzopardi- Alexander 1997
<i>Austronesian languages (7)</i>		

Table 2.1: (continued)

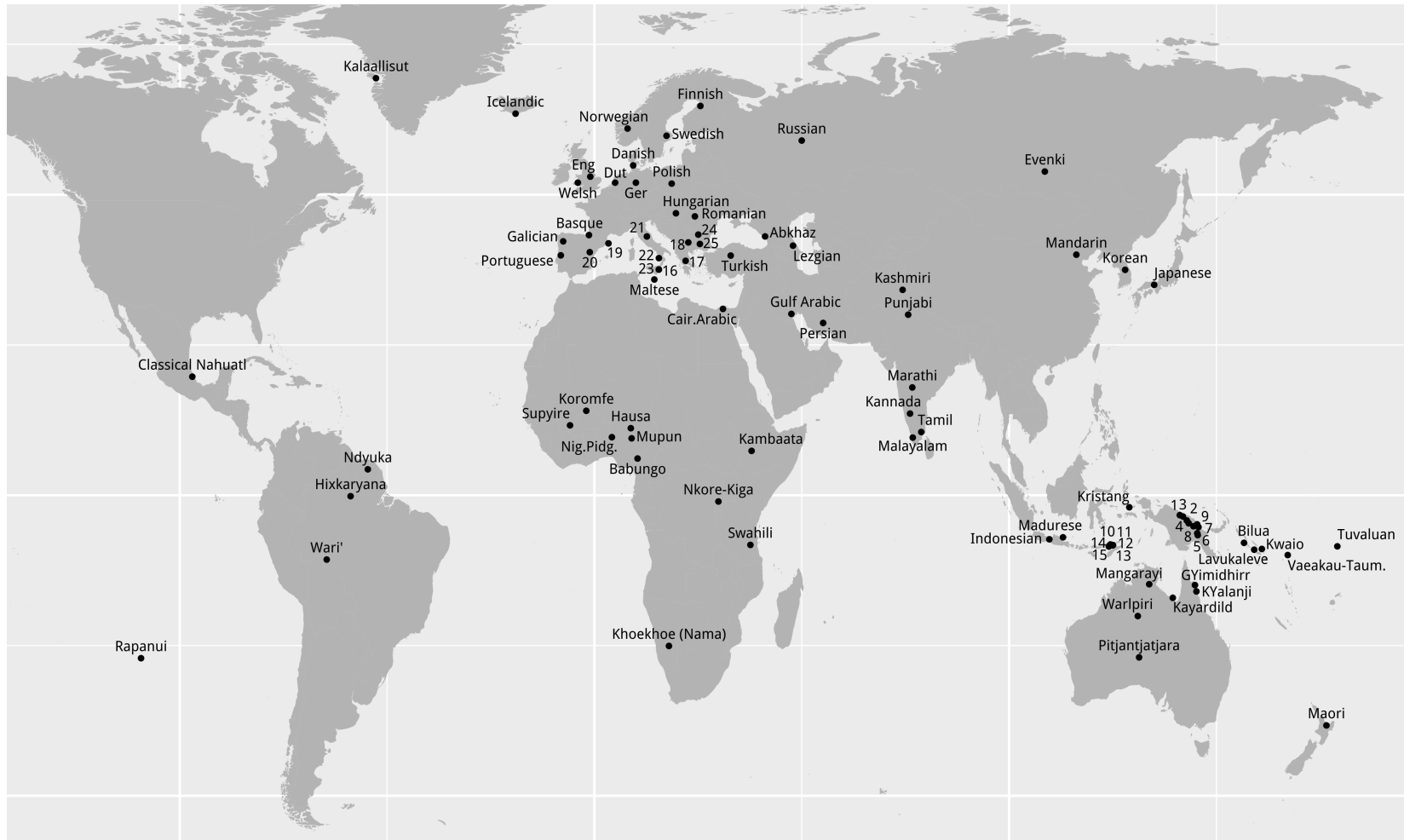
Language	Family	Main source(s)
Indonesian	Austronesian, Malay	Ewing 2005, Sneddon 1996
Madurese	Austronesian, Malayo-Polynesian	Davies 2010
Kwaio	Austronesian, Oceanic, Central-Eastern Oceanic	Keesing 1985
Maori	Austronesian, Oceanic, Eastern Polynesian	(C) Bauer 1993
Rapanui	Austronesian, Oceanic, Eastern Polynesian	(C) Du Feu 1996
Tuvaluan	Austronesian, Oceanic, Polynesian	(C) Besnier 2000
Vaeakau-Taumako	Austronesian, Oceanic, Polynesian	Næss & Hovdhaugen 2011
<i>Creoles (3)</i>		
Ndyuka	(Surinam, English-based?)	(C) Huttar & Huttar 1994
Nigerian Pidgin	(Nigeria, English-based)	(C) Faraclas 1996
Kristang	(Malaysia, Portuguese-based)	Baxter 1988
<i>Dravidian languages (3)</i>		
Kannada	Dravidian, Southern	(C) Sridhar 1990
Malayalam	Dravidian, Southern	(C) Asher & Kumari 1997
Tamil	Dravidian, Southern	(C) Asher 1985
<i>Niger-Congo languages (5)</i>		
Babungo	Niger-Congo, Grassfields Bantu	(C) Schaub 1985
Nkore-Kiga	Niger-Congo, Bantu	(C) Taylor 1985
Swahili	Niger-Congo, Bantu	
Koromfe	Niger-Congo, Gur	(C) Rennison 1997
Supyire	Niger-Congo, Gur	Carlson 1994
<i>Caucasian languages (2)</i>		
Lezgian	North East Caucasian	Haspelmath 1993
Abkhaz	North West Caucasian	(C) Hewitt 1989

A survey of non-possessive nominal person marking

Table 2.1: (continued)

Language	Family	Main source(s)
<i>Uralic languages (2)</i>		
Hungarian	Uralic	(C) Kenesei et al. 1998
Finnish	Uralic, Finnic	(C) Sulkala & Karjalainen 1992
<i>Various (11)</i>		
Basque	Isolate	(C) Saltarelli 1988; Trask 2003; de Rijk 2008; Artiagoitia 2012
Classical Nahuatl	Uto-Aztecan	Andrews 1975
Evenki	Tungusic	(C) Nedjalkov 1997
Hixkaryana	Carib	(C) Derbyshire 1979
Japanese	Isolate	(C) Hinds 1988; Noguchi 1997; Inokuma 2009
Korean	Isolate	(C) Sohn 1994; Choi 2014b
Khoekhoe (Nama)	Khoesan, Central	Böhm 1985, Haacke 1976, 1977, Maho 1998, Vossen 2013
Kalaallisut (West Greenlandic)	Eskimo-Aleut, Inuit-Inupiaq	(C) Fortescue 1984
Mandarin	Sino-Tibetan, Chinese	
Turkish	Turkic	(C) Kornfilt 1997
Wari'	Chapakuran	(C) Everett & Kern 1997

Figure 2.1: Map of (most) languages included in the sample^a



^aKey for the map: 1–Imonda, 2–Manambu, 3–Awtuw, 4–Alamblak, 5–Fore, 6–Yagaria, 7–Amele, 8–Kobon, 9–Usan, 10–Adang, 11–Kamang, 12–Sawila, 13–Wersing, 14–Teiwa, 15–Western Pantar, 16–Calabrian Greek, 17–Greek, 18–Aromanian, 19–Catalan, 20–Spanish, 21–Italian, 22–Northern Calabrese, 23–Southern Calabrese, 24–Bulgarian, 25–Pomak

2.2 Absence of APCs

Most languages in the survey show some form of non-possessive nominal person marking, partly owing to the sampling method as discussed above. However, there is a small number of languages for which I have not been able to get relevant data and to establish the existence or lack of APCs or similar devices. They are listed in (42).

- (42) Rapanui (Austronesian)
Madurese (Austronesian)
Vaeakau-Taumako (Austronesian)
Teiwa (TNG)

Although the main criterion for inclusion in the sample was the availability of information on non-possessive nominal person marking, Rapanui was included for largest possible coverage of the *Routledge Descriptive Grammar* series and the latter three languages due to their relevance to the discussion of PPDCs in section 2.5. As discussed in section 2.1.1, absence of relevant information does not mean that these languages lack APCs (or some other form of nominal person marking).

Similar considerations apply to the five languages listed in (43), which have clitic markers of nominal person as discussed in section 2.3.4. While I have no information concerning APCs in these languages, the existence of clitic person marking does not preclude APCs as Bilua (Solomon Islands) seems to have both, see section 2.3.4.

- (43) Alamblak (Sepik)
Fore (TNG)
Hua (TNG)
Khoekhoe (Khoesan)
Classical Nahuatl (Uto-Aztecan)

Two languages in the sample have been explicitly claimed to lack APCs: Basque and Hixkaryana. In section 2.3.4.1, I will address these claims for Basque and present a phenomenon that seems to take the place of APCs in the language.

Concerning Hixkaryana, Derbyshire (1979: 131) observes that “[p]ronoun-noun constructions are normally handled in separate equative sentences” as illustrated in (44). This suggests that pronouns do not occur adnominally in this language.

2.3 The relative position of person marking

- (44) minayari hori amna ntono. nimno hokono [Hixkaryana]
species-of-leaf seeking we-EXCL went house one-occupied with
rma amna
same-ref. we-EXCL
‘We housebuilders went looking for leaves’ Derbyshire 1979: 131, (290)

It may be noted additionally that demonstrative pronouns in Hixkaryana show the same inability of appearing adnominally – or ‘adjectivally’ in Derbyshire’s terms – and that the same strategy of equative sentences is used instead (Derbyshire 1979: 131).

- (45) nux mokro raheno
my-younger-brother that-one he-seduced-me
‘That younger brother of mine seduced me’ Derbyshire 1979: 132, (293a)

For the further discussion of nominal person I discount Hixkaryana and the four languages in (42), leaving a total of 87 languages.

2.3 The relative position of person marking

This section deals with crosslinguistic variation in the word order of APCs. Against the background of recent claims about a tight relationship or even categorial identity of (adnominal) pronouns and demonstratives (Blake 2001, Choi 2014b, Höhn 2016, Rauh 2003), they would be expected to occur in similar positions relative to the head noun – at least in languages where pronouns and demonstratives are in complementary distribution (see section 2.5 for languages where this is not the case). This is confirmed in the present dataset, where languages with prenominal APCs tend to have prenominal demonstratives while languages with postnominal APCs overwhelmingly make use of postnominal demonstratives.

Moreover, I explore the possibility of interactions between the position of adnominal pronouns and the type of adposition in a language. This again relates to the question of whether adnominal pronouns show word order harmony effects of the familiar type, with languages with prenominal APCs more commonly displaying prepositions and postnominal APCs going with postpositions. While this is indeed the situation observed for languages with postnominal APCs, the effect is not stable for languages with prenominal APCs if one corrects for potential bias due to the overrepresentation of certain language families in the sample.

Because of the restricted availability of relevant data I cannot provide a clear overview of the interaction of adnominal pronouns with adjectives or numerals here. Impressionistically, there seems to be a strong tendency for non-possessive nominal person marking to be

A survey of non-possessive nominal person marking

instantiated at the left or right edge of the extended nominal projection, rather than inside of other parts of the *xnP*. This aligns with Louagie & Verstraete’s (2015) observation of such a tendency in an extensive sample of Australian languages. Interestingly, there is another possible parallel to Julien’s (2002) observation concerning the tendency for verbal subject agreement to be peripheral if expressed separately in verbal morphology (Julien 2002: 249f.).

Concerning the ordering of the adnominal pronoun relative to the head noun three possibilities are feasible: languages with prenominal pronouns (section 2.3.1), with postnominal pronouns (section 2.3.2) and languages with adnominal pronouns in pre- and postnominal position (what I will call “ambidirectional APCs”; section 2.3.3). Clitic nominal person marking is addressed in section 2.3.4 and section 2.3.5 summarises the findings.

2.3.1 Prenominal pronoun

The majority of languages in the sample have APCs where the pronoun precedes the noun (63 languages). According to the relative order of noun and demonstrative and the use of pre- vs. postpositions, further subclasses can be distinguished:

Languages where APCs and demonstratives are prenominal form the largest class (58 languages). Within this type, the 35 languages listed in Table 2.2 have prepositions. The majority of these languages also display head-initial VO order in the clausal domain, except for Dutch, German and Persian.

Table 2.2: Languages with prepositions and prenominal APCs and demonstratives

Language	Affiliation	Adpositions	WO
Hausa	Afroasiatic, Chadic	pre	SVO
Mupun	Afroasiatic, Chadic	pre	SVO
Gulf Arabic	Afroasiatic, Semitic	pre	SVO
Maltese	Afroasiatic, Semitic	pre	SVO
Maori	Austronesian, Oceanic	pre	VSO
Nigerian Pidgin	Creole, English-based	pre	SVO
Kristang	Creole, Portuguese	pre	SVO
Ndyuka	Creole, English-based	pre	SVO
Danish	IE, Germanic, North	pre	SVO
Norwegian	IE, Germanic, North	pre	SVO
Swedish	IE, Germanic, North	pre	SVO
Icelandic	IE, Germanic, North	pre	SVO
Dutch	IE, Germanic, West	pre	SOV

2.3 The relative position of person marking

English	IE, Germanic, West	pre	SVO
German	IE, Germanic, West	pre	SOV
Calabrian Greek	IE, Hellenic	pre	SVO
Greek	IE, Hellenic	pre	SVO
Persian	IE, Indo-Iranian	pre	SOV
Aromanian	IE, Romance, East	pre	SVO
Romanian	IE, Romance, East	pre	SVO
Catalan	IE, Romance, Iberian	pre	SVO
Galician	IE, Romance, Iberian	pre	SVO
Portuguese	IE, Romance, Iberian	pre	SVO
Spanish	IE, Romance, Iberian	pre	SVO
Italian	IE, Romance, Italo	pre	SVO
Southern Calabrian	IE, Romance, Italo	pre	SVO
Northern Calabrian	IE, Romance, Italo	pre	SVO
Russian	IE, Slavic, East	pre	SVO
Bulgarian	IE, Slavic, South	pre	SVO
Pomak	IE, Slavic, South	pre	SVO
Polish	IE, Slavic, West	pre	SVO
Babungo	Niger-Congo, Grassfields Bantu	pre	SVO
Nkore-Kiga	Niger-Congo, Bantu	pre	SVO
Swahili	Niger-Congo, Bantu	pre	SVO
Mandarin	Sino-Tibetan, Chinese	pre/post?	SVO

Most Indo-European languages in the sample fall in this category. Some examples of APCs from non-Indo-European languages with this pattern are illustrated in (46). APCs are highlighted in boldface throughout most of this chapter.

- (46) a. kora jenti muré, tudu **nus kristáng** bai [Kristang]
 when person die all 1PL go
 ‘When people die, all we Kristangs go (to the wake).’ Baxter 1988: 86, (11)
- b. **Intom il-haddiema** għandkom tingħaqu [Maltese]
 you the-workers have-2PL unite-2PL
 ‘You workmen should unite together.’
 Borg & Azzopardi-Alexander 1997: 202, (915)

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- c. **war manaja** nə [Mupun]
3SG.F manager DEF
'she, the manager'⁶ Frajzyngier 1993: 172, (154)

The inclusion of Hausa in this category is complicated by the fact that there are short and long forms of the demonstratives and only the latter are prenominal, see section 2.4.2.

The three Niger-Congo languages Babungo, Nkore-Kiga and Swahili are often described as having Noun-Demonstrative order (e.g. Dryer 2013). Here, I nevertheless classify them as having prenominal demonstratives, since all of them optionally allow prenominal demonstratives for emphasis (cf. Schaub 1985: 73 for Babungo, Tayebwa 2014: 10 for Nkore-Kiga and Mpiranya 2015: 35 for Swahili). For current purposes, I take the availability of prenominal demonstratives to be sufficient to include these languages in this category, especially if one takes into account the likely connection to an emphatic interpretation in both cases.

- (47) a. **yia vii ndâa** gó ntó' [Babungo]
we-EXCL people smithy go-PRS palace
'We, the blacksmiths, go to the palace.'⁷ Schaub 1985: 197, (134)
- b. **itwe abanyankore** ni-tu-hinga ebinyoobwa [Nkore-Kiga]
we Banyankole PROG-we-cultivate groundnuts
'We Banyankole grow groundnuts.' Taylor 1985: 131, (368)
- c. **Nyinyi wa-nafunzi** m-me-cheka. [Swahili]
you 2^{NCL}-students 2PL-PST-laugh
'You students laughed.'

The 23 languages listed in Table 2.3 also have prenominal APCs and demonstratives but postpositions. Most of them display OV order (with the exception of Bilua, Finnish and, partly, Mangarayi and Hungarian).⁸

⁶The comma used in the translation is not discussed in the original source. I assume that it is due to the ungrammaticality of third person adnominal pronouns in English rather than an indication for an appositive structure in Mupun.

⁷Schaub (1985) does not discuss the commas used in the English translation. I take them to be irrelevant to the status of the Babungo expression as an APC.

⁸Louagie & Verstraete (2015: 173, Table 3) suggest that Guugu Yimidhirr has a preference for prenominal APCs but also allows postnominal ones, so like closely related Kuku Yalanji it might also be classified as having ambidirectional APCs, see section 2.3.3. I leave this possibility open here, but see Haviland (1979: 104) for the prenominal use.

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Table 2.3: Languages with postpositions and prenominal APCs and demonstratives

Language	Affiliation	Adpositions	WO
Japanese	Isolate	post	SOV
Korean	Isolate	post	SOV
Evenki	Tungusic	post	SOV
Turkish	Turkic	post	SOV
Mangarayi	Gunwingguan	post?	OV/OVS?
Diyari	Pama-Nyungan, Karna	post?	SOV
Guugu Yimidhirr	Pama-Nyungan, Yim-Yal-Yid.	post?	SOV
Kayardild	Tangkic	post?	discourse prominent
Bilua	Central Solomons	post	SVO
Manambu	Sepik, Ndu	post	SOV
Awtuw	Sepik, Ram	post?	SOV
Kambaata	Afroasiatic, Cushitic	post?	SOV
Tamil	Dravidian	post	SOV
Kannada	Dravidian	post	SOV
Malayalam	Dravidian	post	SOV
Kashmiri	IE, Indo-Aryan	post	SOV
Marathi	IE, Indo-Aryan	post	SOV
Punjabi	IE, Indo-Aryan	post	SOV
Supyire	Niger-Congo, Gur	post	SOV
Lezgian	North East Caucasian	post	SOV
Abkhaz	North West Caucasian	post	SOV
Hungarian	Uralic	post	SVO
Finnish	Uralic, Finnic	post	SVO

Discussing Kayardild, Evans (1995: 251) observes for appositive constructions with more than one NP like (48) that “[t]here is no requirement that such apposed NPs be contiguous”. It is not clear if this also means that adnominal pronouns do not have to be adjacent to at least one other part of an APC in the language.

- (48) **niya dathin-a danka-a kamarri-ja thalardin-d** [Kayardild]
 3SG.NOM that-NOM man-NOM ask-IMP old man-NOM
 ‘Ask him, that man, the old man!’ Evans 1995: 251, (6-37); emphasis added

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A final class of languages with prenominal APCs has postnominal demonstratives. Probably due to this disharmony in word order this group is the smallest, comprising only the seven languages in Table 2.4. Most of them have prepositions, except for Koromfe (see chapter 3 section 3.2).

Table 2.4: Languages with prenominal pronouns and postnominal demonstratives

Language	Affiliation	Adpositions	WO
Cair. Egypt. Coll. Arabic	Afroasiatic, Semitic	pre	SVO
Indonesian	Austronesian, Malay	pre	SVO
Kwaio	Austronesian, Oceanic	pre	SOV
Tuvaluan	Austronesian, Oceanic	pre	VSO
Wari'	Chapakuran	pre	VOS
Welsh	Indoeuropean, Celtic	pre	VSO
Koromfe	Niger-Congo, Gur	pre/post	SVO

The results of the preceding discussion are summarised in Table 2.5, which indicates how the languages with prenominal APCs pattern with respect to the position of adnominal demonstratives and adpositions relative to the noun.

Table 2.5: Word order of languages with prenominal APCs

	Dem-N	N-Dem	Total
Prepositions	35	6	41
Postpositions	23	—	23
Both	—	1	1
Total	58	7	65

The present sample displays a clear preference for languages with prenominal APCs to also use prenominal demonstratives, while the combination with postnominal demonstratives represents a much more marked pattern. There also appears to be a slight preference for prenominal APC languages to have prepositions, although this is much less pronounced than the preference for prenominal demonstratives (58:7 for prenominal demonstratives compared to only 41:23 for prepositions).

Of course, these results are hampered by the lack of balancing in the sample. The relative amount of languages with prenominal demonstratives and prepositions, for instance, is certainly influenced by the unproportionally high number of Indoeuropean languages. To

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reduce such bias, Table 2.6 follows Dryer (1989) in counting genera instead of languages (e.g. all Germanic languages count as one data point). Notice that the ‘total’ cells avoid counting a genus twice so that they give the actual number of genera in the sample presenting the relevant property. For example, Semitic and Oceanic languages are present both in the Dem-N/Prepositions and the N-Dem/Prepositions categories, but they only count once for the total of languages with prepositions and the overall total of languages with prenominal APCs.

Table 2.6: Word order of languages with prenominal APCs (compressed)

	Dem-N	N-Dem	Total
Prepositions	13	5	16
Postpositions	18	—	18
Both	—	1	1
Total	31	6	34

On this count, prenominal demonstratives are still much more frequent than postnominal ones (31:6), but the adposition effect disappears. So while the tendency for languages with prenominal APCs to have prenominal demonstratives seems to be stable, they display no strong preference for the directionality of adpositions.

2.3.2 Postnominal pronoun

Postnominal APCs are considerably rarer in the sample than prenominal ones, and are only attested in one Pama-Nyungan and several Papuan languages (from distinct genera). All 12 languages with postnominal APCs in the present sample have postpositions, and the 10 in Table 2.7 also show postnominal demonstratives.

A potential problem is that postnominal APCs in subject position are potentially string-identical to resumptive structures of the sort *The teacher, he called me*. I generally relied on the analysis provided in the respective grammars, which associate the pronominal with the noun phrase (albeit sometimes as some form of adjoined modifier) in all languages cited. Given the head-final tendency in most of these languages, this does not seem implausible. Stronger evidence would involve non-peripheral uses of APCs, which are rarely attested in the reported data.⁹

The strongest arguments in favour of an analysis of postnominal pronouns as part of the xnP come from postnominal APCs in Amele, commonly termed “pronominal copy” in gram-

⁹This may be partly due to independent information structural concerns on the assumption that APCs tend to denote topics or contrastive constituents.

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Table 2.7: Languages with postnominal pronouns and demonstratives

Language	Affiliation	Adpositions	WO
Warlpiri	Pama-Nyungan, Ngarrkic	post	SOV
Lavukaleve	Central Solomons	post	SOV
Amele	TNG, Madang	post	SOV
Usan	TNG, Madang	post	SOV
Adang	TNG, TAP	post?	SOV
Kaera	TNG, TAP	post	SOV
Kamang	TNG, TAP	post	V-final
Wersing	TNG, TAP	unclear	SOV
Western Pantar	TNG, TAP	post?	SOV
Sawila	TNG, TAP	unclear	V-final

matical descriptions of the language (Roberts 1987: 162, 210). The construction is compatible with proper names and common noun phrases (49).

- (49) a. **Bunag uqa** ho-i-a. [Amele]
 Bunag 3SG come-3SG-TODPST
 ‘Bunag came.’
- b. **Dana ben eu age** ho-ig-a.
 man big that 3PL come-3PL-TODPST
 ‘Those leaders (big men) came.’ after Roberts 1987: 210, (283)-(284)

Example (49b) also illustrates the role of adnominal pronouns in number marking in Amele. While nouns are generally unmarked for number in this language, plural adnominal pronouns enforce a plural interpretation (cf. the discussion of Wiltschko 2008 for similar effects in several North American languages).

Syntactic evidence suggesting that the postnominal pronoun indeed forms a constituent with the noun phrase stems from a construction where “the nominal or NP is in apposition to the pronoun and is separated from the [prenominal; GFKH] pronoun by a slight pause and has its own intonational peak” (Roberts 1987: 210). Importantly, the noun itself may be followed by a pronoun in turn, see (50). Roberts’s (1987, 210) sketch of the intonation curve suggests that this postnominal pronoun has a closer relationship to the head noun than the appositive prenominal pronoun, as indicated by the commas.¹⁰

¹⁰Similar data have been used to argue that English APCs are not appositions. Expressions like *we, (that is) we linguists* are possible and non-tautological, indicating that the relationship between [we] and [we linguists] is different from that between [we] and [linguists], cf. the discussion of Lawrenz (1993: ch. 6) in chapter 1.

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- (50) Age, dana (**age**), na qete-ig-a.
 3PL man (3PL) tree cut-3PL-TODPST
 ‘They, the men, chopped down the tree.’ Roberts 1987: 210, (282)

The double occurrence of the third person plural pronoun in (51) also suggest that the first one is not a resumptive, but part of the subject *xnP*.

- (51) **Dana i/eu age** age Hilu dec.
 man this/that 3PL 3PL from
 ‘These/those men are from Hilu.’ Roberts 1987: 217, (315)

Kamang raises some questions regarding the possibility of particles intervening between the NP and the adnominal pronoun, cf. (52). Schapper (2014) describes the adnominal pronouns as NP-external appositions as illustrated in the template in (53). Crucially, this position is still described as NP-related, not as a resumptive, which I take as support for the language having (a form of) postnominal APCs.

- (52) [**pe**]_{NP}=**ou geeng**_{APPOS} sue ak=mi lok-ma [Kamang]
 pig=RESTR 3.FOC come here=IN dig.up-PFV
 ‘It was pigs that came here and dug up the earth.’ Schapper 2014: 314, (59)

- (53) Template of the Kamang NP
 PSR_{NP} [AGR_{PSR}-N_{HEAD} ATTR NUMP RC DEM ART]_{NP} APPOS Schapper 2014: 307, (39)

In addition to adnominal pronouns, the (optional) plural marker *nung* and numerals can also appear in this “appositional slot” as shown in (54). Kamang nouns seem to be number-neutral like in Amele¹¹ and additional marking can enforce a plural interpretation. In contrast to Amele, Kamang uses a dedicated plural marker, *nung*, rather than a regular pronoun for this purpose. However, the syntax of the construction appears to parallel that of Amele since the plural marking is realised in the same syntactic position as adnominal pronouns in both languages.

- (54) Items in the NP-appositional slot Schapper 2014: 313f., (58)
- a. almakang=ak **gera**
 people=DEF 3.CONTR
 ‘the {specific group of} people’

¹¹Although Schapper does not claim this explicitly, her examples and glosses suggest it. See the singular gloss and plural translation for *pe* is glossed ‘pig’ in (52) above.

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- b. almakang=ak **nung**
 people=DEF PL
 ‘the {multiple} people’
- c. almakang=ak **uh biat**
 people=DEF CLF four
 ‘the people, four of them’

For Warlpiri, Hale (1973: 317) notes that “noun phrases of the form /ɲarka ɲatju/ ‘I man’, /yapa ɲatju/ ‘I person’ [...] are possible, albeit rare, in actual usage”.

The Lavukaleve data in (55) suggest that it also has postnominal APCs, and for present purposes I classify it as such. See chapter 5 section 5.2.1 for discussion.

- (55) a. **Lavukale e** ta a-na legis e-kae-ham [Lavukaleve]
 Lavukals 1PL.EXCL time(M) 3SG.M.OBJ-in leaf(N) 3SGN.OBJ-put.up-PURP
 hi-vele ni’kol feo nato la feo.
 do/say-SUCC first 3SG.F.FOC sago.palm(F) SG.F.ART 3SG.F.FOC
 ‘When we Lavukals are preparing a kite to fly, the first thing [to get] is the sago.’
- b. aka **malav e** roa-ru kiu-la-m.
 then people 1PL.EXCL one.SGM-none die-NEG-SGM
 ‘And we, the people [lit: the people we] didn’t die. [i.e. None of us people died.]’
 after Terrill 2003: 171, (196)/(197)

The only languages in the sample with both postnominal APCs and prenominal demonstratives are two Trans-New Guinea languages, Fore (Scott 1978) and the *Move* dialect of Yagaria (Renck 1975). While closely related Hua shares many of their properties, I have no information concerning adnominal pronouns in it (see section 2.3.4.3 for further discussion of these Gorokan languages).

Table 2.9: Languages with postnominal pronouns and prenominal demonstratives

Language	Affiliation	Adpositions	WO
Yagaria	TNG, Kainantu-Goroka	post(?)	SOV
Fore	TNG, Kainantu-Goroka	post(?)	V-final

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Yagaria has adnominal pronouns “in focused phrases [...], especially in transitive clauses where the marking of the subject is obligatory” (Renck 1975: 17), see (56ab). The construction is also available, albeit rare, with focused objects, see (56c).¹²

- (56) a. **yale pagaea** gayale hae-d-a-e
 people they pig shoot-PST-3PL-IND
 ‘The people shot the pig.’ Renck 1975: 17
- b. **ve agaea** o-d-i-e
 man he come-PST-3SG-IND
 ‘The man came.’ Renck 1975: 17
- c. **dagea ve agaea** ∅-begi-d-u-e
 I man he him-hit-PST-1SG-IND
 ‘I hit the man.’ Renck 1975: 18

Renck (1975: 181) suggests that the position of the head noun and of the adnominal pronoun “can both be regarded as head slots”. The pronominal “puts the noun or noun phrase into focus somewhat in the same way as the pivotal marker does” (ibid.). This pivotal marker is in complementary distribution with the adnominal pronouns in Yagaria (and possibly also in Fore, cf. Scott 1978: 103), see also section 2.3.4.3.

I classify Fore examples like (57) as also displaying postnominal APCs. However, an analysis as resumptive pronoun cannot be excluded given that Scott (1978: 100) observes the possibility of an intonational break before the “pronominal copy” indicated by the comma in (57).

- (57) teméni’-N a-pa:’, áe’ kana-y-e [Fore]
 Temeni-OBL his-father he come-he-IND
 ‘Temeni’s father is coming.’ after Scott 1978: 100, (163a)

The results of this section are summarised in Table 2.10. Counting only genera to reduce the impact of over-represented families in the sample as in the previous section, yields the “compressed” distribution in Table 2.11. The languages where the type of adposition is unclear from the data are both Timor-Alor-Pantar languages, which are also represented in the N-Dem/Postpositions cell. Since they are not counted twice, the sample contains a total of five genera with postnominal APCs.

As noted above, all these languages with postnominal APCs have postpositions. Moreover, there is a strong tendency for these languages to have postnominal demonstratives. An

¹²While Renck’s examples only involve third person pronouns, no person restriction is mentioned. Yagaria also has affixal person markers, see section 2.3.4.3 for non-third person examples of that type.

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Table 2.10: Word order of languages with postnominal APCs

	Dem-N	N-Dem	Total
Prepositions	–	–	–
Postpositions	2	8	10
Unclear	–	2	2
Total	2	10	12

Table 2.11: Word order of languages with postnominal APCs (compressed)

	Dem-N	N-Dem	Total
Prepositions	–	–	–
Postpositions	1	4	5
Unclear	–	1	1

additional observation, not reflected in the tables, is that all languages in the sample with postnominal APCs also have at least a tendency for verb-final clause structure (several of them have also been described as non-configurational, cf. Hale 1983).

The co-occurrence of postnominal APCs and postnominal demonstratives with postpositions and verb-finality puts these observations in line with the tendency for word order to be harmonic (Baker 2008, Hawkins 1980, 1982).

2.3.3 Ambidirectional APCs

The five languages listed in Table 2.12 appear to allow both pre- and postnominal pronouns.¹³ The status of Kalaallisut and Kobon is not entirely clear.

Table 2.12: Languages with ambidirectional APCs

Language	Affiliation	Dem-N/N-Dem	Adpositions	WO
Kalaallisut	Eskimo-Aleut	both	post	SOV
Pitjantjatjara	Pama-Ny., Wati	both	post	SOV
Kuku Yalanji	Pama-Ny., Yim-Yal-Yid.	both	post	SOV
Imonda	Border	both	post	SOV
Kobon	TNG, Madang	N-Dem	post	V-final

¹³As noted in footnote 8, Guugu Yimidhirr may also have ambidirectional APCs like closely related Kuku Yalanji. See Louagie & Verstraete (2015: 173, Table 3) for further discussion of APC ordering in several Australian languages not included here.

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All five languages have postpositions¹⁴ and are either verb-final or discourse configurational with a tendency for verb-final orders. Except for Kobon, they also allow adnominal demonstratives to appear in pre- and postnominal position.

For Pitjantjatjara, I have only been able to find instances of potential APCs with the third person singular pronoun *paluru*. An example for both a prenominal and a postnominal use is provided in (58).

- (58) a. Minyma **paluru** ngayu-nya nya-ngu [Pitjantjatjara]
 woman 3SG.NOM 1SG.ACC see-PST
 ‘The woman saw me.’ Bowe 1990: 31, (110)
- b. **Paluru** wati nyara wara-ngku mutaka palya-nu
 3SG.NOM man distant tall-ERG car fix-PST
 ‘The tall man over there (in contrast to the other one) fixed the car.’
 Bowe 1990: 34, (114)

Referring to personal communication from Paul Eckhert, Bowe (1990: 34) suggests that prenominal demonstratives in Pitjantjatjara “seem to imply contrast”. It appears that prenominal *paluru* behaves the same way, as illustrated by the translation of (58b).

Example (59) illustrates that *paluru* can also accompany other pronouns, although at least its singular number feature seems to be neutralised in this case.

- (59) Ka kunyu panya **paluru** pula ngari-ra tjirirpi-ri-ngu
 and REP ANAPH 3SG.NOM 3DU.NOM lie-ANT(MERG) day-INCH-PST
 ‘And the two of them lay down until morning.’ Bowe 1990: 48, (179)

In contrast to the distinction in terms of contrastivity that Bowe (1990) observes between prenominal and postnominal APCs in Pitjantjatjara, Patz’s (2002) description of Kuku Yalanji frames the difference between pre- and postnominal APCs in terms of anaphoric and new reference. While examples with prenominal adnominal pronouns “can be assumed to have anaphoric or definite reference” (Patz 2002: 202), e.g. (60), cases with postnominal pronouns “normally [establish] a new reference” (ibid.) as in (61). According to Patz, the postnominal pronoun anaphorically picks up on this new reference.¹⁵

- (60) a. **nyulu** jalbu [Kuku Yalanji]
 3SG woman
 ‘the woman’ after Patz 2002: 202; gloss extrapolated

¹⁴On claims that Kuku Yalanji has prepositions see footnote 2 on page 27.

¹⁵Emphasis added in the examples.

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In his discussion of “pronoun-noun constructions” in Kalaallisut, Fortescue (1984: 256f.) only mentions the construction in (63a) with a prenominal pronoun. Notice that the morphology on the core nominal indicates that it is “verbalized by *u* ‘be’ and re-nominalized by the intransitive participial morpheme” (Fortescue 1984: 256), so it is not entirely clear whether this is a *bona fide* APC or rather a relative clause construction.¹⁸ However, there also seems to be the construction in (63b) with a postnominal pronoun.

- (63) a. uagut kalaali-u-sugut [Kalaallisut]
we Greenlander-be-1PL.PTCP
‘we Greenlanders’ Fortescue 1984: 257
- b. kalaalli-t uagut
Greenlander-ABS.PL we
‘we Greenlanders’ after Fortescue 1984: 110; gloss extrapolated

As a matter of fact, the construction in (63b) seems like a more prototypical APC, since it lacks participial morphology. If (63a) is not an APC, Kalaallisut would be more aptly characterised as having postnominal APCs.

However, demonstratives – which are used in place of independent third person pronouns in the language, suggesting that they form a class with personal pronouns – can also appear pre- and postnominally in Kalaallisut, see (64). This observation may support the hypothesis that Kalaallisut has ambidirectional APCs in parallel to its ambidirectional demonstratives. I treat the language as having ambidirectional APCs here, although classification as postnominal APC language may be more appropriate depending on the correct analysis of (63a).

- (64) a. arnaq una
woman that
‘that woman’
- b. una arnaq
that woman
‘that female person’¹⁹ Fortescue 1984: 110; gloss extrapolated for b

The classification of Kobon potentially raises similar issues. Postnominal APCs, traditionally termed ‘pronominal copies’ like in related Amele (see section 2.3.2), are reportedly in common use (Davies 1989: 107). They may mark the grammatical function of arguments

¹⁸It is not made explicit if the noun has to appear with participial marking, although the description seems to suggest it.

¹⁹Fortescue (1984) does not discuss the different translations, so their significance is unclear.

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consisting of juxtaposed nouns (Davies 1989: 108), as illustrated in (65b), but can also be found outside such contexts, e.g. in (66) which minimally contrasts with (65a).

- (65) a. Juab Minöp ñ-öb.
Juab Minöp give-PRF.3SG
'Juab gave it to Minöp.'
- b. **Juab Minöp kalip** ñ-öb.
Juab Minöp OBJ.3DU give-PRF.3SG
'He gave it to Juap and Minöp.' after Davies 1989: 108, (264)

- (66) Yad **Wanis nip** ñi-bin.
1SG Wanis OBJ.3SG give-PRF.3SG
'I gave it to Wanis.' after Davies 1989: 157, (409b)

Prenominal pronouns are possible in all kinds of noun phrases apart from “forms to which the particle *ke* is postposed” (Davies 1989: 157), which “frequently functions to add emphasis to the nominal or pronominal head of a noun phrase...” (Davies 1989: 89). The significance of this restriction is unclear, although if *ke* is a focus marker it might indicate that the nominal part is an apposition rather than forming a full argument together with the prenominal pronoun. If there was an intonational break between the prenominal pronoun and the noun as discussed for Amele in section 2.3.2 from Roberts (1987: 210), that would support the idea that actually Kobon only has postnominal APCs.²⁰ However, since Davies (1989) does not provide similar data, this issue has to remain open and I treat Kobon as having ambidirectional APCs for now.

- (67) a. Kale bi gau rau-bal. [Kobon]
3PL man there buy-PFV.3PL
'They (plural) bought it.'
- b. Yad Kaunsol nibi bi abad aij gi-mid-pin.
1SG councillor woman man look after good do-HABIT-PFV.1SG
'As councillor I look after the people well.' Davies 1989: 157, (408ad)

In conclusion, five languages in the sample potentially show ambidirectional APCs, although it is possible that Kalaallisut or Kobon actually have postnominal APCs.

²⁰In that case, all languages with ambidirectional APCs would have ambidirectional demonstratives.

2.3.4 Clitic/affixal person marking

The languages listed in Table 2.13 display affixal or clitic morphological marking of nominal person. Five of the eight languages are Papuan, but they represent three independent families (Sepik, Trans-New Guinea, Central Solomons). The phenomenon is thus attested in a total of six different language families in the sample.²¹

Table 2.13: Languages with clitic nominal person marking

Language	Affiliation	Dem-N/N-Dem	Adpositions	WO
Basque	isolate	N-Dem	post	SOV
Bilua	Central Solomons	Dem-N	post	SVO
Alamblak	Sepik, Ram	Dem-N (?)	post?	SOV
Yagaria	TNG, Gorokan	Dem-N	post?	SOV
Hua	TNG, Gorokan	Dem-N	post	SOV
Fore	TNG, Gorokan	Dem-N	post?	V-final
Khoekhoe	Khoesan	Dem-N	post	SOV
Classical Nahuatl	Uto-Aztecan	variable	unclear	VSO?

Formally, in almost all attested cases the nominal person markers are cliticised to the right edge of the noun phrase.²² Classical Nahuatl presents the only case of prefixed non-possessive nominal person marking. In Basque, Bilua and Khoekhoe the person markers are quite clearly phrasal suffixes, or enclitics, and the same probably holds for the Gorokan languages. The available data are insufficient to determine this for Alamblak.

Basque, Bilua, Yagaria, Fore and Khoekhoe appear to show prenominal pronouns in addition to clitic person marking, but only Basque and Bilua show cases of simultaneous marking by adnominal pronouns and person enclitics. As discussed below in section 2.3.4.5, contrary to superficial appearances the “pronominal stems” in Khoekhoe are probably better analysed as a type of article (Haacke 1976, 1977) than as prenominal pronouns.

Bilua and Khoekhoe provide rare examples of languages with person agreement within the noun phrase – Bilua by means of (impoverished) person marking on modifier phrases, cf. example (76), Khoekhoe through the person-sensitive NP-initial determiners just mentioned.

Most languages with clitic person-marking are verb-final, with the exception of Classical Nahuatl, where basic word order is hard to establish due to its polysynthetic structure, and Bilua, which Obata (2003: 6, 272) describes as basically SVO. Apart from Classical Nahuatl,

²¹A superficially similar phenomenon involving different deictic levels encoded on definite articles in Pomak (and presumably Macedonian) is discussed in chapter 7.

²²Thereby, they contrast with the prenominal proclitic or prefixal possessor markers, which are also attested in Bilua, Hua, Fore and Yagaria. Note that the latter three languages use suffixal possessive suffixes for alienable possession.

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these languages all have postpositions, which suggests that they also have head-final *xnPs*. Interestingly, all of them – except for Classical Nahuatl and (non-western varieties of) Basque – have pronominal demonstratives. This sets them apart from the languages with postnominal APCs, which display a strong tendency for postnominal demonstratives (see section 2.3.2 and chapter 3). In the following, I briefly describe and exemplify the relevant phenomena for the eight languages in Table 2.13. The three Gorokan languages will be discussed together.

2.3.4.1 Basque

Saltarelli (1988: 210) argues that pronoun-noun construction like *guk emakumeok* in (68) do not involve a pronominal determiner in Basque, but “take the form of appositive phrases since both the pronoun and the noun must bear the same case markings”. This argument builds on the observation that in Basque *xnPs* case and number are marked only once phrase-finally. In the expression *gu-k emakume-ok* ‘we women’, both the pronoun and the lexical noun carry separate ergative marking, suggesting that they form two separate nominal projections.

- (68) *gu-k emakume-ok g-eu-re eskubide-ak errespeta*
we-ERG woman-PROXART.PL.ERG we-EMPH-GEN right-ABS.PL respect
d-it-za-te-la eska-tzen
3ABS-(PRS)-ABS.PL-AUX.2(SBJV)-ERG.3PL-COMP request-hab
d-u-gu
3ABS-(PRS)-AUX.2-1PL.ERG
‘We women request that they have respect for our rights.’
after Saltarelli 1988: 210, (978)

Artiagoitia (2012) presents a similar argument from headedness. The Basque noun phrase is right-headed, so pronominal determiners should appear in the position of the definite article at the right edge of the *xnP*. The ungrammaticality of pronouns like *gu* ‘we’ or *zuek* ‘you (pl.)’ in (69b) suggests, then, that Basque does not have pronominal determiners.

- (69) a. English: we tradesmen / you idiots Abney 1987: 282
b. Basque: *merkatari gu / *tentel zuek Artiagoitia 2012: 32, (26)

While these considerations strongly suggest that the pronoun in the subject of (68) is not a pronominal determiner, I propose that Basque nevertheless encodes nominal person in the *xnP*. Data supporting this view, which owes much to the insightful discussion of Artiagoitia (2012: sec. 5), will be presented in the following. Chapter 3 section 3.4.2 further addresses the implementation of such an analysis.

2.3 The relative position of person marking

While example (69b) shows that regular personal pronouns cannot be used as determiners in Basque, I suggest that this is due to restrictions on the contexts in which the VIs corresponding to personal pronouns can occur rather than a ban on (non-third person) marking on D. I propose that the so-called proximate (Trask 2003: 122; Areta 2009: 67) or inclusive (de Rijk 2008: 501) plural marker *-ok* realises person features in examples like (68), and that certain ‘personal’ uses of demonstratives also indicate the presence of person-related features in the Basque determiner position.

The Basque *-ok* marker is in complementary distribution with the noun phrase-final “plain” determiner *-a(k)* and typically treated as a special form of the plural determiner. De Rijk (2008: 502) distinguishes the three uses illustrated by the accompanying examples in (70).²³

- (70) a. Marking matters already mentioned in the same discourse

Eta **guzti-ok** gramatik-a-z balia-tzen dira beti.
 and all-PROXART.PL.ABS grammar-DET-INST use-IPFV AUX.3PL.ABS always
 ‘And **all of these** always make use of grammar.’ de Rijk 2008: 502, (89b)

- b. Marking the addressee, if plural

Galdu didazue **aita-seme-ok** afari-ta-ko
 spoil 3SG.ABS.AUX.1SG.DAT.2PLERG father-son-PROXART.PL.ERG dinner-LOC-LNK
 gogo guzti-a.
 appetite all-DET.ABS
 ‘**You, father and son**, have spoiled my whole appetite for dinner.’
 de Rijk 2008: 502, (90a)

- c. Marking a group to which the speaker belongs

Zor berri-a dugu **euskaldun-ok** Orixe-rekin.
 debt new-DET.ABS 3SG.ABS.AUX.1PL.ERG Basque-PROXART.PL Orixe-COM
 ‘**We Basques** have a new debt to Orixe.’ de Rijk 2008: 502, (91a)

The first, apparently anaphoric use seems unsurprising for a type of definite article. For present purposes, the uses in (70bc) are of central interest, since they display the sort of interpretation and the appropriate person agreement effects expected from an APC. The *-ok*-marked ergative argument appears with second person plural ergative agreement on the auxiliary in (70b), and with first person plural ergative agreement in (70c).²⁴ On the standard

²³Glossing added.

²⁴Trask (2003: 122) describes the use of *-ok* in a similar way, offering as translations for *gizonok* the variants ‘we men’, ‘you men’ and ‘the men here’. The final translation suggests a demonstrative meaning component, which may be related to (70a).

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assumption that the features of the ergative *xnP* control ergative agreement on the auxiliary, the relevant interpretable person features must be encoded on the relevant *xnP*.²⁵

Trask (2003: 122) and Areta (2009: 67) suggest that *-ok* is only found in western varieties of Basque. I have, however, been able to elicit it from speakers of central varieties (Gipuzkoa), too (four speakers in the age bracket 20–40). Interestingly, the use of the proximate plural for person marking differs slightly from the pattern above. In (71), the auxiliaries show agreement for a first (71a) and second person (71b) plural ergative subject respectively. In both cases, overt pronouns are optional. Crucially, while the inclusive marker was mandatory for my consultants in the first person context (71a), they strongly preferred the regular article in second person contexts.²⁶

- (71) a. (Gu-k) ikasle-**ok** ogi-a erre [Central Basque]
 we-ERG student-PROXART.PL.ERG bread-DET.SG burn
 genuen atzo.
 1PLERG.AUX yesterday
 ‘We students baked bread yesterday.’
- b. (Zuek) ikasle-**ek** ogi-a erre zenuten atzo.
 you.PL.ERG student-DET.PL.ERG bread-DET.SG burn 2PLERG.AUX yesterday
 ‘You students baked bread yesterday.’

While the precise distribution of dialectal variation requires further clarification, there seems to be a west-east continuum as to which contexts license the use of the inclusive plural *-ok*. The descriptions by Trask (2003) and Areta (2009), which are in line with de Rijk’s (2008) observations, as well as informal elicitation on my part suggest that *-ok* is obligatorily used in [+participant] *xnPs* by speakers of western (Bizkaian) varieties, while central (Gipuzkoan) varieties require the use of *-ok* only in the first person, i.e. [+author] contexts. Eastern dialects of Basque seem to lack the inclusive determiner altogether, using the regular articles for all persons.

The deictic terminology of “proximate plural” may suggest that this morpheme occurs in such contexts because a first/second person plural set is (maximally) proximate to the speaker or addressee. However, this does not explain its obligatoriness in examples like (71a)

²⁵A similar reasoning applies if one analyses the agreement markers on the auxiliary as clitics (Arregi & Nevins 2012a). The argumentation might not directly apply under a symmetric model of agreement like Ackema & Neeleman (2013), although some mechanism would still have to ensure that *-ok* appears in appropriate contexts.

²⁶Some consultants also admitted the use of *-ok* for second person when asked about it. However, all four consultants independently of each other first offered the version with the simple article. I assume here that *-ok* is normally sensitive to first person contexts and that the optional admission of *-ok* for some speakers may be due to interdialectal influence.

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over the plain definite article, since the latter is not specified for particular deictic/spatial properties and should therefore not be ruled out in phrases referring to an entity that happens to be proximate. Against this background, I suggest that Basque actually encodes nominal person on its articles, i.e. it actually has pronominal determiners – maybe more appropriately termed ‘personal’ determiners given that they are not realised as regular pronouns. The use of demonstratives in non-third person contexts further corroborates this view. Demonstratives in Basque appear in the same phrase-final position as the definite article (e.g. Artiagoitia 2012), see (72).

- (72) a. gizon handi-a/ak
man big-DET.SG/PL
‘the big man/men’
- b. gizon handi hau/hau-ek
man big DEM.1.SG/DEM.1-PL
‘this/these big man/men’

Artiagoitia (2012: 66) presents data like (73) as – albeit “less common” – singular counterparts of the plural forms with *-ok*. The suffixal markers *-au* and *-ori* are identical to the demonstratives *hau* and *hori* except for their spelling. Basque distinguishes three levels of distance in its demonstratives, and these two are first and second level demonstratives respectively. In contrast to what was observed above, the presence of the overt pronoun is obligatory in these examples, at least in western varieties of Basque (Xabier Artiagoitia, p.c.).²⁷

- (73) a. ni gizajo-au
I poor-PROXART
‘poor me’
- b. zu txotxolo-ori
you fool-PROXART
‘you fool’

Artiagoitia 2012: 66, (100)

The example in (74), kindly provided by Xabier Artiagoitia (p.c.), is another, naturally occurring illustration of a proximate demonstrative heading a DP that controls first person singular ergative agreement, showing that these constructions can be used in argument positions. Notice that there is no initial overt pronoun like in (73) here.

²⁷This is probably related to the phenomenon of double definiteness, the co-occurrence of *xnP*-initial demonstratives with the typical final demonstratives or determiners also found in western varieties (Artiagoitia 2012: sec. 5).

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- (74) [saile-ko zuzendari-a naiz-en **hon-ek**]_{DP} adierazi nahi
 department-LNK director-DET.SG be.1SG.ABS-REL **DEM.1-ERG.SG** declare can
 dut...
 3SG.ABS.AUX.1SG.ERG

‘This one who I am the departmental director can(1sg) declare (that...)’

I take these ‘personal’ uses of demonstratives to provide further support for the presence of grammatically active person features in the determiner position of the Basque *xnP*. A potential analysis of the personal uses of the inclusive article can be found in chapter 3 section 3.4.2 and the relationship between demonstrative marking and person agreement is further discussed in chapter 7, with particular reference to Basque in section 7.2.3.

2.3.4.2 Bilua

There are two ways in which person is expressed in Bilua noun phrases: full personal pronouns in the prenominal determiner position and phrase-final enclitic person-number-gender markers (PNG-markers). The former option, accounting for the occurrence of Bilua in Table 2.3, is illustrated in (75). The ligature marker (with the allomorphs *a*, *ka*, *za*) “occurs only between morphemes which belong to the same phrase” (Obata 2003: 79), indicating that the example does not involve apposition of two distinct noun phrases.

- (75) enge=a saidi
 1PL.EXCL=LIG family
 ‘we, family’ Obata 2003: 79, (7.10)

The phrase-final pronominal enclitic is illustrated in (76). This example also shows that pronominal determiners and PNG-markers are not mutually exclusive.

- (76) **enge**=a Solomoni=a=ma maba poso=**ngela**
 1PL.EXCL=LIG Solomon=LIG=3SG.F person PL.M=**1PL.EXCL**
 ‘we, Solomon people’ Obata 2003: 85, (7.35)

This example also displays another use of pronominal enclitics, namely as head of what Obata calls modifier phrases (MPs), albeit with a highly syncretised paradigm. If the head noun is third person singular masculine, the third person singular masculine enclitic *la* is used, but for all other person-number-gender values of the main noun phrase the third person feminine singular enclitic *ma* is used instead to mark MPs. This is illustrated by the use of *ma* in *Solomoni=a=ma* in (76), which heads the modifier of the overall first person plural noun phrase.

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The picture changes slightly if the head of the noun phrase is elided, in which case “the head of the MP [modifier phrase; GFKH] can be any third person pronominal enclitic” (Obata 2003: 87). In (77), the third person plural enclitic *mu* heads the MP *laizamu*. The head noun *maba* ‘person’ is understood to be elided and the phrase-final person marker *mela* indicates that the referent of the xnP is second person plural.

- (77) ... lai=za=**mu**=mela inio me.
where=LIG=3PL=2PL FOC.NONF 2PL
‘...you are people from where?’ Obata 2003: 88, (7.49)

In such circumstances, the – less informative – third person pronominal enclitic heading the MP may be elided. This is illustrated in (78), where the marker *mu* from the previous example is missing and only the first person plural exclusive enclitic *ngela* is retained phrase-finally.

- (78) Enge ta pui koi=za=**ngela**,
1PL TOP NEG here=LIG=1PL.EXCL
‘We are not people from here,’ Obata 2003: 89, (7.52)

A possible difference between the two strategies of nominal person marking may be in the connection of the pronouns in determiner position to a definite interpretation. While in most cases a definite interpretation will also arise for non-third person pronominal enclitics, examples like (77) might suggest that the enclitics do not have to trigger a definite interpretation. For present purposes, I assume that the enclitic marker is the primary exponent of nominal person in Bilua, while the personal pronouns in the prenominal position express person secondarily. This is relevant to the overall count in section 2.3.5.²⁸

2.3.4.3 Gorokan (Yagaria, Hua, Fore)

Because of their close genetic relationship, Fore, Yagaria (*Move* dialect) and Hua are treated jointly in this section. Fore is not only genetically related but also spoken in close vicinity to Yagaria (Scott 1978), while Hua is described as “the westernmost dialect of Yagaria” (Haiman 1980). All three languages have nominal person markers. They are listed for Yagaria in Table 2.14²⁹ and for Fore in Table 2.15. Examples are provided in (79) and (80).

²⁸The absence of the clitic marker in (75) may be potential problems.

²⁹“The forms for the 2. and 3. persons plural do not occur.” (Renck 1975: 18, fn. 20)

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Table 2.14: Person suffixes occurring with nouns in Yagaria (Renck 1975: 18)

	Singular	Dual	Plural
1	-da	-ta'a/-la'a	-ta/-la
2	-ka/-ga	-tata/-lata	-
3	-a	-tata/-lata	-

Table 2.15: Appositional pronouns in Fore (Scott 1978: 79, (123))

	First	Second	Third
Singular	-na:	-ka:	-wa:
Plural	-ta:	-ti	-wai
Dual	-ta:si	-tisi	-waisi

- (79) a. Ovu-da ma-lo' bei-d-u-e [Yagaria]
 Ovi-I this-LOC live-PST-1.SG-IND
 'I, Ovu, am here.'

- b. a-tata e-d-a'-e
 woman-they.DU come-PST-3.DU-IND
 'The two women came.'

Renck 1975: 19

- (80) aogi yagara:'na: kana-u-e [Fore]
 good man-1SG come-1SG-IND
 'I, the good man, come.'

Scott 1978: 80

Hua has several nominal person markers, but the morphologically simplest set are the suffixes in Table 2.16. In contrast to the Yagaria and Fore markers, these appear obligatorily and exclusively with proper names and kinship terms as illustrated in (81).

Table 2.16: "Pronominal appositions" in Hua (Haiman 1980: 226)

Person	Singular	Dual	Plural
1	da	ta'a	ta
2	Ka (/ga/)	Kita'a (/gita'a/)	Kita (/gita/)

- (81) a. *Forapi'* + *da* → /*forapi da*/ 'I, Forapi' [Hua]
 b. *Forapi'* + *Ka* → /*forapiga*/ 'You, Forapi'
 c. *nono'* + '*Kama*' + *da* → /*nonokama da*/ 'I your maternal uncle' Haiman 1980: 226

2.3 The relative position of person marking

Hua also displays person marking in the genitive plural forms of two of the few nouns with genuine plural forms (Hua generally has optional number). As illustrated in (82), this seems to be based on the markers in Table 2.16. I am not aware of similar effects in Yagaria or Fore.

- (82) Person marked genitive forms in Hua Haiman 1980: 240
- | | | |
|----------------|----------------|--------|
| <i>vimata</i> | ‘of us men’ | (1pl.) |
| <i>vi’ita</i> | ‘of you men’ | (2pl.) |
| <i>ademata</i> | ‘of us women’ | (1pl.) |
| <i>adita</i> | ‘of you women’ | (2pl.) |

Before turning to the most generalised Hua person marker, I need to present a morpheme that has been described under various names for many languages of the area (see Scott 1978: 101f. for an overview): personaliser for Kamano (Scott 1978 cites Payne & Drew 1970: 74, the version available online is Payne & Drew 1970/2009: 45f.)³⁰, article for Gimi (McBride & McBride 1972: 4), pivot for Yagaria (Renck 1975), delineator for Fore (Scott 1978) or ergative for Hua (Haiman 1980). I use the term personaliser here and adapt the glossing of the examples below correspondingly.³¹

Renck (1975: 35) describes the Yagaria personaliser “as [an] agentive marker in transitive clauses”, equivalent to the use of postnominal pronouns discussed in section 2.3.2 above. Although usually found with transitive subjects (83a), the personaliser is also optionally employed as subject marker with intransitive predicates (83b) and furthermore used to mark possessors (83).

- (83) a. *ve-ma’* *gayale* *hao-d-i-e* [Yagaria]
man-PLZ pig shoot-PST-3.SG-IND
‘The man shot the pig.’
- b. *a-ba’* *o-d-i-e*
woman-PLZ come-PST-3.SG-IND
‘The woman came.’

³⁰Kamano also has nominal person markers that attach to the personaliser, see (i).

- (i) *Vähe’-mo’-’na* *eri’-ne-u-e* [Kamano]
person-PLZ-I take-PST-I-EMPH
‘I a person took it.’ Payne & Drew 1970/2009: 13, (76)

³¹Renck (1975) has PIV for the pivotal marker, Scott (1978) DLN for delineator.

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- c. ve-ma' bade
 man-PLZ boy
 'the man's son'

Renck 1975: 35

Similarly, the Fore personaliser *-ma* "marks someone or something thought of as being a potential agent or actor" (Scott 1978: 101). Its interpretive import is illustrated in (84). Due to the marking on *araga-ma* 'girl-PLZ', it remains the agent in (84ab) in spite of the difference in word order. There is no personaliser in (84cd), so the change in word order leads to a corresponding change in interpretation.

- (84) a. arágama mási á-egú-y-e. [Fore]
 girl-PLZ boy him-hit-she-IND
 'The girl hit the boy.'
- b. mási áragamá a-egú-y-e.
 boy girl-PLZ him-hit-she-IND
 'The girl hit the boy.'
- c. aragá mási á-egú-y-e.
 girl boy him/her-hit-she/he-IND
 'The girl hit the boy.'
- d. mási áragá a-egú-y-e.
 boy girl him/her-hit-she/he-IND
 'The boy hit the girl.' after Scott 1978: 101, (165)

As in Yagaria, the Fore personaliser is not limited to transitive environments (85).

- (85) wasaná-ma kana-y-e
 person-PLZ come-he-IND
 'A person comes; People are coming.' Scott 1978: 101

Moreover, it can co-occur with case markers in (86). The personaliser allomorph *-wama* used here is employed with non-human nouns. In contrast to previous examples, the personaliser marks the object here. Scott (1978: 102) comments that it "indicates the agentive potentiality of the item to which it is attached" and suggests an alternative translation for illustration: "He sees the pig (doing something)."

- (86) yaga:-wama-N a-ka-y-e
 pig-PLZ-OBL it-see-he-IND
 'He sees the pig.' Scott 1978: 102, (106)

2.3 The relative position of person marking

The examples above showed that the person clitics can occur independently of the personaliser in Yagaria and Fore, but at least in Yagaria a person marker may also follow the personaliser, see (87).³² It is unclear whether this is possible in Fore.

- (87) Avedini agae' bade-ma-da game' de hao-d-u-e [Yagaria]
 Avedini his boy-PLZ-I fight man shoot-PST-1.SG-IND
 'I, Avedini's son, shot the enemy.' Renck 1975: 19

The Hua cognate of the personaliser, analysed as ergative by Haiman (1980)³³, is obligatorily person-marked. Table 2.17 contains the pronominal forms marked with what Haiman calls "an allomorph of a special ergative [i.e. personaliser; GFKH] suffix *-(viba)mu'*, illustrating the various person-number combinations. The allomorph *-mu'* appears with nouns and displays the same person-number inflection, see Table 2.18 with a proper name illustrating the singular examples – which additionally display the obligatory person marking from Table 2.16 preceding the person-marked personaliser – and common nouns.

Table 2.17: Personaliser-marked personal pronouns in Hua (Haiman 1980: 229)

sg.	1.	<i>dgai + vibamuda</i>
	2.	<i>kgai + vibamuga</i>
	3.	<i>kai + vibamu'</i>
dl.	1.	<i>ra'agai + vibamuta'a</i>
	2.	<i>pa'agai + vibamita'a</i>
pl.	1.	<i>rgai + vibamuta</i>
	2.	<i>pgai + vibamita</i>

Table 2.18: Personaliser suffixes in Hua (Haiman 1980: 229)

sg.	1.	<i>Busa' + da + muda</i>	'I, Busa'
	2.	<i>Busa' + Ka + muga</i>	'You, Busa'
	3.	<i>Busa' + ∅ + mu'</i>	'Busa'
dl.	1.	<i>de + tori + muta'a</i>	'we two men'
	2.	<i>de + tori + mita'a</i>	'you two men'
	3.	<i>de + tori + mi</i>	'two men'
pl.	1.	<i>vede + muta</i>	'we men'
	2.	<i>vede + mita</i>	'you men'
	3.	<i>vede + mi</i>	'men'

³²In contrast, postnominal pronouns in Yagaria are in complementary distribution with the personaliser (Renck 1975: 17), see section 2.3.2.

³³But see Scott (1978: 102) for a rejection of the ergative analysis at least for Fore. I remain agnostic here.

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I propose that the personal “ergative” in Hua consists of a personaliser and a person clitic of the sort in Table 2.16 (including some non-trivial effects of allomorphy). The double occurrence of person clitics in the singular examples from Table 2.18 implies that the personaliser starts a distinct person domain inside the *xnP*, associated with a prototypical agentive interpretation (cf. also Bárány 2015, Richards 2008). In Hua, the person clitics mark a class of elements that include proper names, kinship terms and the personaliser – the obvious unifying characteristic being personhood. In Yagaria and Fore, the domain for person clitics may not make special provisions for proper names and kinship terms, but still includes the person domain marked by the personaliser (or a postnominal pronoun, see above and section 2.3.2).

In conclusion, person marking in the Gorokan languages investigated seems to be connected to the agentivity marking personaliser morpheme. The mutual exclusivity of postnominal adnominal pronouns and the personaliser in Yagaria suggests that they occupy the same syntactic position. The distribution of the affixal person markers is more complicated and appears to vary between the languages. The requirement for a person marker to accompany the personaliser seems looser in Yagaria insofar as they may but need not co-occur. In Fore it is also clearly possible for the affixal person markers to occur independently of the personaliser. The lack of examples where they co-occur would even be consistent with the hypothesis that they are in complementary distribution, although the small amount of available data does not allow for very strong claims. Hua, finally, appears to have the strongest co-occurrence requirement of personaliser and person marking, potentially to the extent of them converging into one morpheme.

2.3.4.4 Alamlak

The Alamlak PNG-markers in Table 2.19 “syntactically function to terminate the phrase” and “indicate the person, number, and gender of the head noun root of the phrase” (Bruce 1984: 96). These markers are also evident in the personal pronouns, see Table 2.20.

Table 2.19: PNG-markers in Alamlak (Bruce 1984: 96, Table 34)

Person	Singular	Dual	Plural
1	-a(n) ³⁴	-në(n)	-nëm
2	∅(n)	-fïn	-kë(m)
3 (M)	-r	-f	-m
3 (F)	-t	-f	-m

³⁴The final nasals in parentheses “elide phrase-finally” (Bruce 1984: 302).

2.3 The relative position of person marking

Table 2.20: Alambalak personal pronouns (after Bruce 1984: 75, Table 21 and 22)

Person	Singular	Dual	Plural
1	na(n)	në(n)	nëm
2	ni(n)	nifin	nikë(m)
3	rër (m) rët (f)	rëf	rëm

Bruce’s (1984) examples for the usage of the PNG-markers reproduced in (88) leave open questions about the possibility of the co-occurrence of full pronouns and the PNG-markers inside the same noun phrase. Although only plural examples are provided, Table 2.19 and the accompanying description suggest that this sort of construction is also compatible with non-plural contexts (e.g. *I fisherman love the sea*).

- (88) a. yima-m
 person-3PL
 ‘people’ Bruce 1984: 96, (157)
- b. yima-kë
 person-2PL
 ‘you people’
- c. yima-nëm
 person-1PL
 ‘we people’ Bruce 1984: 96, (158)

2.3.4.5 Khoekhoe

Outside Oceania, Khoekhoe (also known as Nama) represents another language with clitic nominal person marking. As illustrated in (89-90), a morpheme at the right edge of nominal expressions marks gender, number and, crucially, person.

- (89) sa khoe-**ta** ké nĩ ra ||’o.
 ART.ADDR person-1PL.INCL.C TOP? COMPEL PROG die
 ‘We humans have to die.’ after Böhm 1985: 133, (27b)³⁵

³⁵For help with the gloss I thank Menán du Plessis. The gloss for the APC is my interpretation of Haacke’s (1977) proposals, see chapter 3.

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- (90) Hè é **tó** Khwé-**tò** dì góé à **tó** ò **||é** Qúva-**||è** †xà-á-tè
 DEM 2PL.C Khwe-2PL.C POSS cattle OBJ 2PL.C POSS 1PL.M White-1PL.M give-I-PRS
 à.
 OBJ

‘Here are yours, the Khwe’s cows that we, the Whites, give you.’

Kilian-Hatz 2008: 41, (1) quoting Köhler 1989: 514f.

This construction is not restricted to the plural, see (91b). Notice the recurring nominal root *khoe* ‘person’.

- (91) a. ti-ta ké ko ro **||’a-||na**.
 ART.SG.AUTH-1SG TOP? RECPST PROG baptise
 ‘I used to baptise.’

- b. ti **khoe-ta** ké ko ro **||’a-||na**.
 ART.SG.AUTH person-1SG TOP? RECPST PROG baptise

‘I for my part used to baptise.’

after Böhm 1985: 133, (26)³⁶

Lyons (1999: 143) exemplifies a full paradigm of these expressions for masculine gender singular and plural:

- | | | | | |
|------|-------------|--------------------|------------|-----------------|
| (92) | tii kxòe-ta | (I person-1SG+M) | ‘*I man’ | Lyons 1999: 143 |
| | saá kxòe-ts | (you person-2SG+M) | ‘*you man’ | |
| | kxòe-p | (person-3SG+M) | ‘the man’ | |
| | sií kxòe-ke | (we person-1PL+M) | ‘we men’ | |
| | saá kxòe-kò | (you person-2PL+M) | ‘you men’ | |
| | kxòe-ku | (person-3PL+M) | ‘the men’ | |

The pronominal morphemes used to be identified as pronominal stems (e.g. Dempwolff 1934/35, Rust 1965), as they also appear in the forms traditionally analysed as pronouns, e.g. *tita* ‘I’ in (91a). In contrast, Haacke (1976, 1977) argues that the pronominal morphemes *tii*, *saá*, *sií* are determiners/article-like elements, essentially equivalent to the demonstratives.³⁷ Their form depends on the “communicative status” of the referent as sketched in (93). Notice that the third person marker *||i* is absent in (92) above.

³⁶Example and translation as cited except for morpheme boundary in *sa-ta* to conform with Leipzig glossing rules. Remarks from footnote 35 apply.

³⁷Cf. also Böhm (1985: 134f.) who claims that “[d]ie verschiedenen Pronominalstämme sind wahrscheinlich deiktischer Natur” (the different pronominal stems are probably deictic in nature).

2.3 The relative position of person marking

(93)	<i>ti</i>	<i>si</i>	<i>sa</i>	//î	Haacke 2013: 146, (161)
	+definite	+definite	+definite	+definite	
	+speaker	+speaker	+addressee	+discussed	
	+human	-addressee	+human		
	+singular	+human			
		-singular			

2.3.4.6 Classical Nahuatl

To conclude the overview of clitic nominal person markers I turn to Classical Nahuatl. As illustrated by the following examples from Andrews (1975: 146), it differs from the previous examples in using personal prefixes rather than suffixes.

- (94) a. **tipilli** = **ti-∅(pil)li** = 2nd-abs(nobleman)sg = you are a nobleman
 b. **nicihuātl** = **ni-∅(cihuā)tl** = 1st-abs(woman)sg = I am a woman
 c. **toquichmeh** = **t-∅(oquich)meh** = 1st-abs(man)pl = we are men

The gloss *abs* indicates the *absolute state* of the nominal, contrasting with the *possessive state* for possessed nouns. According to Andrews (1975: 144), “[t]he person prefix is an obligatory constituent of a Nahuatl noun word [irrespective of its state; GFKH] ... [and] is actually present even when, in the case of the third person, nothing is sounded to represent it”. This, he argues, is due to the paradigmatic contrast to the other person forms which *do* have overt exponents.

As indicated by the translations, these expressions can form equative clauses on their own. In this context, it is worth noting that the person markers on nominals in the absolute state are the “same as the person prefixes found in indicative verb words (**ni-**, **ti-**, ∅; **ti-**, **am-**, ∅)” (Andrews 1975: 144). These facts may suggest that these complex words actually consist of a copula and an incorporated noun, which would be consistent with the idea that Classical Nahuatl was polysynthetic in the sense of Baker (1996).³⁸

Putting this issue aside, consider the examples in (95) where person-marked nominals express the subject, object and possessor respectively. The coreferent person markers on the verb and noun are highlighted in bold.

- (95) a. **Nicuīca ni**Petoloh.
 I-sing I-am-Peter
 ‘I, Peter, sing.’ Andrews 1975: 193

³⁸But cf. MacSwan (1998) for a critique arguing that at least modern Southeast Puebla Nahuatl is not polysynthetic.

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- b. **Nēchitta** **ni**Petoloh.
 He-sees-me I-am-Peter
 ‘He sees me, Peter.’ Andrews 1975: 193
- c. **Nocal** **ni**Petoloh.
 It-is-my-house/they-are-my-houses I-am-Peter
 ‘It is my house (and I am Peter)./They are my houses (and I am Peter).’
Andrews 1975: 194

2.3.5 Summary

Table 2.21 summarises the findings of this section. Bilua has prenominal APCs and enclitic person marking (see section 2.3.4). To avoid counting it twice, I count it as a language with enclitic person and mark it as (+1) in the PreAPC column without counting. I proceed similarly for the Gorokan languages Yagaria and Fore, which seem to have postnominal APCs and enclitic person marking. Again, I only count them for the latter category (along with the third Gorokan language Hua), and mark the fact that they also appear to feature postnominal APCs with an uncounted (+2) marking in the respective column.

Table 2.21: Word order in non-possessive nominal person marking

	PreAPC	PostAPC	Both	Enclitic	Proclitic	Total
Dem-N	57 (+1)	– (+2)	–	6	–	63
N-Dem	7	10	1	1	–	19
Both	–	–	4	–	–	4
N/A	–	–	–	–	1	1
Total	64 (+1)	10 (+2)	5	7	1	87

Compressing the data again by counting genera only, we arrive at the distribution in Table 2.22. Notice again that the total counts do not necessarily add up, since genera are not counted twice. On both counts, prenominal APCs are by far the most common type in the data.

Among the languages with prenominal APCs the ratio of Dem-N orders to N-Dem orders is 57:7 (31:6 compressed). On either count, this is clearly higher than in the general data reported in the *World Atlas of Language Structures*, where Dryer (2013) reports 542 languages Dem-N with as opposed to 561 with N-Dem order out of a total sample of 1224. The mirror image, albeit with a much smaller base, obtains for languages with postnominal APCs. Here we find 10 instances (4 compressed) of N-Dem order as opposed to only two cases (one compressed)

2.3 The relative position of person marking

Table 2.22: Word order in non-possessive nominal person marking (compressed)

	PreAPC	PostAPC	Both	Enclitic	Proclitic	Total
Dem-N	30 (+1)	– (+1)	–	4	–	33
N-Dem	6	4	1	1	–	11
Both	–	–	4	–	–	4
N/A	–	–	–	–	1	1
Total	33 (+1)	4 (+1)	5	5	1	44

of Dem-N order. This suggests a bias for postnominal demonstratives in languages with postnominal APCs.

Keeping in mind the restrictions of the present sample, some tentative generalisations emerge from the data reviewed in this section. Two generalisations are formulated in (96) and (97).

(96) *Languages with prenominal APCs*

- a. No strong preference for either pre- or postpositions.
- b. No strong preference in clausal word order (largely correlates with distribution of pre- and postpositions).
- c. Tendency for prenominal demonstratives.

(97) *Languages with postnominal APCs*

- a. Have postpositions.
- b. Clausal word order is verb-final or “non-configurational” (Hale 1983).
- c. Strong tendency for postnominal demonstratives.

The tendency in (98) emerges as a corollary of (96c) and (97c).

(98) Languages with prenominal demonstratives strongly tend to have prenominal APCs.

Finally, the following observations seem to hold for clitic person marking:

(99) *Languages with clitic person marking*

- a. Strong tendency for final clitics.
- b. Strong tendency for head-finality.
- c. Strong preference for prenominal demonstratives.

2.4 Articles

Since definite articles are only present in about half of the languages in the sample, they were set aside in the discussion of word order in section 2.3. Where they exist, however, their behaviour in APCs is of particular interest considering the central role their complementary distribution in languages like English plays for Postal's (1969) pronominal determiner analysis of APCs (see chapter 1). The present sample shows that this complementary distribution is not universal.

Of the 43 languages with definite articles listed in Table 2.23, 19 behave like English in not using the article in APCs and 21 allow or require the use of articles in APCs. This relatively even split suggests that there is no *a priori* markedness difference between these options. For completeness' sake, the table includes languages with definite articles for which I do not have APC data. For all other languages, I indicate whether they require or allow the occurrence of an article in APCs and whether APCs show restrictions for person (see section 2.6).

Table 2.23: Definite articles in APCs

Language	APC + Art.	Person	Comment on article
Italian	✗	no 3	
Southern Calabrese	✗	no 3	
Northern Calabrese	✗	no 3	
Hungarian	✗	no 3	
German	✗	no 3	
Dutch	✗	no 3	
Welsh	✗	no 3	
English	✗	no 3	
Portuguese	(✗)	no 3	
Swedish	✗	all (3 only sg)	
Norwegian	✗ (colloquially ✓)	all (3 only sg)	
Danish	✗	all (3 only sg)	
Icelandic	✗?	all (3 only sg)	
Kambaata	✗	all?	
Kwaio	✗?	all?	
Lavukaleve	✗?	no 3?	
Basque	✗?	all (3=Dem)	
Ndyuka	✗?	all (3=Art)	
Nigerian Pidin	✗	all	optional

Hausa	not oblig.	all	
Koromfe	not oblig.	all	
Western Pantar	not oblig.	all?	optional; 2 distance levels
Wersing	not oblig.	only 3	2 types: specific, definite
Kamang	not oblig.	all?	2 types: specific, definite
Spanish	✓	no 3?	
Galician	✓	no 3?	
Catalan	✓	no 3	
Greek	✓	all (3=Dem)	
Calabrian Greek	✓	all (3=Dem)	
Bulgarian	✓	no 3?	
Pomak	✓	no 3?	3 levels of distance
Romanian	✓	no 3	
Aromanian	✓	no 3?	
Abkhaz	✓	all	
Maori	✓	all	
Tuvaluan	✓ (optional?)	all	
Gulf Arabic	✓	no 3	
C. Egypt. Arabic	✓	no 3	
Maltese	✓	no 3	
Mupun	✓	all?	
Rapanui	NA	NA	
Vaeakau-Taumako	NA	NA	
Madurese	NA	NA	

Before discussing the languages that employ articles in APCs in more detail, I briefly comment on a phenomenon that straddles the line between APCs and definiteness marking, when languages employ adnominal third person pronouns as a form of definiteness marking.

2.4.1 Third person pronouns used for definiteness marking

The use of third person APCs as a means of definiteness marking has been widely observed in Australian languages (for a detailed comparative discussion see Louagie & Verstraete 2015). In my sample, I have been able to find this phenomenon not only described for the Australian languages Warlpiri (Hale 1973: 316), Diyari (Austin 1981: 97f.), Pitjantjatjara (Bowe 1990: 37), Kuku Yalanji (Patz 2002: 120) and Kayardild (Evans 1995: 239), for an example see (100a), but

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also for the Sepik languages Manambu (Aikhenvald 2008: 197f.) and Awtuw (Feldman 1986: 120–124), see (100b).

- (100) a. niya jungarra dangkaa [Kayardild]
he big man
'the big man' Evans 1995: 239
- b. rey/tey tale [Awtuw]
3M.SG/3F.SG woman
'the woman' Feldman 1986: 123, (21a)

In contrast to the definite articles found in many Indoeuropean languages, this type of marking is not obligatory for a definite NP, but its presence enforces a definite interpretation (cf. e.g. Feldman 1986: 124 for Awtuw).

The Creole language Ndyuka provides a similar case, with the slight difference that Huttar & Huttar (1994) describe it as having definite articles. However, these articles *a* (singular) and *den* (plural) are homophonous with the respective third person pronouns as illustrated in (101).

- (101) A teke a **ondoo kulo** ne a gi Gazon. [Ndyuka]
3SG take the-SG hundred guilders CONJ 3SG give Gazon
'He took the hundred guilders and gave it to Gazon.'
after Huttar & Huttar 1994: 165, (738)

The patterns illustrated here are of special interest concerning an aspect of the pronominal determiner analysis. The lack of third person adnominal pronouns in languages like English has been taken to suggest that the definite article essentially represents a special form of the third person pronoun in this and similar languages (see chapter 5). In light of these considerations, the data in this section may represent cases where no special allomorph is required for third person adnominal pronouns, resulting in rather straightforward alignment with the predictions of the pronominal determiner analysis (see chapter 5).

2.4.2 Overt articles in APCs

This section provides an overview of languages with overt articles in APCs.

2.4.2.1 Obligatory articles

The languages listed in (102) require the use of an article in APCs. Two examples are provided in (103).

(102) Languages with article marking in APCs

Mupun
 Maori
 Tuvaluan
 Abkhaz
 Greek
 Galician
 Catalan
 Spanish

- (103) a. E kaha rawa atu maatou **ngaa** kaiako naa [Maori]
 TAM strong very away 1PL.EXCL the(PL) teacher PROX.2
 ki te pata-patai
 to the RED.ask
 ‘We teachers ask a lot of questions.’ Bauer 1993: 373, (1673)
- b. ha(rà) (š^oa(rà), darà) a-bàhč-aa-ja-y^o-c^oa [Abkhaz]
 we you they ART-garden-PREV-tend-A-PL
 ‘we (you, they) gardeners’³⁹ after Hewitt 1989: 159

The languages in (104) also require the presence of a definiteness marker in APCs with the difference that the markers are postnominal clitics as illustrated in (105).

(104) Languages with postnominal articles

Romanian
 Aromanian
 Bulgarian
 Pomak

- (105) a. Noi români-**i** sîntem de origine roman-ă [Romanian]
 we rumanian.PL-DET.PL be.1PL of origin roman-F.SG
 ‘We the Rumanians are of Roman origin.’ Mallinson 1986: 258, (1272)
- b. Voi pikurar-**li** adrat pini. [Aromanian]
 you.PL shepherd-DET.PL baked.2PL bread
 ‘You shepherds baked bread.’

³⁹Either short or long forms of first and second person pronouns can be used as indicated by the brackets.

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- c. Nuje örendji-eve-**so** stori-me leba. [Pomak]
we student-PL-DET.1 baked-1PL bread
'We students baked bread.'

The Afroasiatic languages in (106) also have articles in APCs as shown in (107), with the difference that they show definiteness agreement, i.e. the proclitic definiteness markers do not only show up on the head noun, but also on adjectival modifiers.

(106) Languages with definiteness agreement

Cairene Egyptian Arabic
Gulf Arabic
Maltese

- (107) a. ?intu ?it[-]talamza tihibbu ?illiʕb [C. Egypt. Arab.]
you(PL) [the-]students you.like playing
'You students like playing.' Gary & Gamal-Eldin 1982: 80, (533)
- b. intu I-baharna aʕarfkum zeen [Gulf Arabic]
you-pl the-Baharna 1SG-know-you well
'I know you Baharna (=Shi'i Bahrainis) only too well!' Holes 1990: 165, (844)
- c. Intom il-haddiema ghandkom tinghaqdu [Maltese]
you the-workers have-2PL unite-2PL
'You workmen should unite together.'
Borg & Azzopardi-Alexander 1997: 202, (915)

The structure of such APCs with definiteness marking (dAPCs) is addressed in further detail in chapter 4 and related to the so-called unagreement phenomenon in chapter 6 (see also Choi 2014b and Höhn 2016).

2.4.2.2 Optional articles

There are a few languages in the sample where the issue of whether an article is present in APCs is less straightforward to answer. The languages in (108) seem to optionally use articles in APCs, but the conditions that regulate their appearance are unclear at the moment.

(108) Languages with optional articles in APCs

Western Pantar
(Wersing)
(Kamang)

Hausa
Koromfe

For the TAP language Western Pantar, Holton (2014) provides an example of an APC with the proximate article *sing* in (109a), but the example in (109b) does not contain an article. This is likely related to the fact that the two articles in Western Pantar are generally described as optional (Holton 2014: 59).⁴⁰

- (109) a. Aname ara **sing** gang mising. [Western Pantar]
 person large ART 3SG.ACT sit
 ‘This big man is sitting.’ Holton 2014: 75, (187); emphasis added
- b. Wenang marung ging pia.
 old.man PL 3PL.ACT descend
 ‘The old men went down.’ Holton 2014: 54, (107)

Hausa has an article that can occur in APCs, see (110a). However, examples like (110b) indicate that this marking is not obligatory.

- (110) a. sū mutânê-n [Hausa]
 they men-DEF
 ‘they the men’ after Newman 2000: 155
- b. mū Háusàwā
 we Hausa
 ‘we Hausa’ after Newman 2000: 371

This apparent optionality is probably connected to the fact that the *-n* morpheme in (110a) actually marks previous reference (Newman 2000: 143) rather than definiteness. This predicts that the appearance of this marker in APCs is not actually optional, but that it should appear when the referent has been mentioned in the discourse. Currently, this is speculation due to a lack of further data.

Koromfe displays the prenominal article *a* in APCs as shown in (111), albeit “only in slow or careful speech” (Rennison 1997: 250f.), since it can be elided by “a quite general phonological process after a mid vowel (and all free pronouns end with the mid vowel [ɔ])” (ibid.). The article does not mark definiteness (Rennison 1997: 80f.), so its apparent optionality does not bear on the question of whether definiteness can be encoded in Koromfe APCs.

⁴⁰ Although the two articles seem to encode a proximate-distal contrast, they are distinct from demonstratives in the language, which encode visibility, specificity and elevation (Holton 2014: 57).

- (111) *uko* (a) *koromba*
DISJ.PRON.1PL ART *proper name*
'we Koromba' Rennison 1997: 251, (585)

Definiteness in Koromfe is marked by noun phrase-final determiners with short and long forms. The former roughly compare to definite articles, the latter to demonstratives (Rennison 1997: 81, 234, 260f.). I have not been able to obtain an example, but it seems to be possible for Koromfe APCs to occur with a determiner (John Rennison, p.c.), qualifying the language for inclusion in this section. For further discussion of Koromfe see chapter 3 section 3.2.

2.5 Personal pronoun-demonstrative constructions

Turning from the interaction of nominal person with articles to its interaction with demonstratives, Blake's (2001) observation in (112) seems to be widely adopted by researchers even if not openly stated.⁴¹

- (112) "Demonstratives can co-occur with nouns but not with the traditional pronouns, not only in Pitta-Pitta but in most other languages..." Blake 2001: 416

Blake argues that their complementary distribution provides an argument for analysing demonstratives and personal pronouns as exponents of the same category. And indeed, for the many languages where this holds, the reasoning is plausible.

However, the languages listed in Table 2.24 allow just this co-occurrence of demonstratives and personal pronouns, a construction I will henceforth refer to as personal pronoun-demonstrative construction (PPDC). The availability of PPDCs suggests that demonstratives and personal pronouns do not form a distributional class in these languages (see also chapter 7) and contradicts a strong generalisation along the lines of (112). The table indicates the relative position of pronoun and demonstrative, whether demonstratives are used as third person pronouns, the relative order of demonstrative and noun and if the demonstrative system of a language is distance- or person-based (Anderson & Keenan 1985).

The consistently negative value in the 3rd=Dem column indicates that languages where personal pronouns and demonstratives co-occur have dedicated third person pronouns distinct from demonstratives. This is coherent with an analysis according to which demonstratives and personal pronouns realise different syntactic positions and hence form distinct classes in such languages.

Further, both person-based and distance-based demonstrative systems are encountered roughly equally often among the languages with PPDCs in the sample. Hence, there does

⁴¹Some of the data and discussion in this section have been reported in Höhn (2015).

2.5 Personal pronoun-demonstrative constructions

Table 2.24: Languages with co-occurrence of demonstratives and personal pronouns

Language	Pron-Dem order	3rd = Dem	NP order	Dem.type
Korean	Dem > Pron	✗	Dem N	person
Japanese	Dem > Pron	✗	Dem N	person
Amele	Dem > Pron	✗	N Dem	person
Kaera	Dem > Pron	✗	N Dem	distance
Guugu Yimidhirr	Pron > Dem	✗	Dem N	distance
Kuku Yalanji	Pron > Dem	✗	Dem N/N Dem	distance
Kayardild	Pron > Dem	✗	Dem N	distance
Indonesian	Pron > Dem	✗	N Dem	distance
Vaeakau-Taumako	Pron > Dem	✗	N Dem	person
Tuvaluan	Pron > Dem	✗	N Dem	person
Maori	Pron > Dem	✗	Dem N/N Dem	person
Teiwa	Pron > Dem	✗	N Dem	distance
Hausa	Pron > Dem	✗	Dem N (Dem)	pers./dist.
Koromfe	Pron > Dem	✗	N Dem	N/A
Manambu	Pron (3) > Dem	✗	Dem N	person
Pitjantjatjara	both?	✗	N Dem/Dem N	distance
Mandarin	both (restr.)	✗	Dem N	distance

not seem to be a connection between the possibility of having PPDCs and the type of demonstrative system used in a language, *pace* speculations by Höhn (2015).

At first sight, there is also no correlation between the relative order of pronoun and demonstrative in PPDCs and the position of demonstratives relative to the noun on the basis of the present data. For example, Korean and Japanese have Dem>Pron order and prenominal demonstratives, while Amele and Kaera have the same order in PPDCs, but demonstratives are postnominal. In chapter 7, I will discuss the insights that these observations may nonetheless provide regarding the hierarchical organisation of person features and demonstratives. In the remainder of this section, I briefly present the types of PPDCs attested in the data classified according to the relative order of demonstratives and personal pronouns.

2.5.1 PPDCs with demonstrative-personal pronoun order

Of the sampled languages, Japanese, Korean and the TNG languages Amele and Kaera allow PPDCs where the demonstrative precedes the personal pronoun.

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Examples from Japanese are illustrated in (113) and Sohn (1994: 281) observes comparable Korean data with examples like *i na* ‘this I/me’.

- (113) a. kono kare
DEM.1 he
‘this he’ Noguchi 1997: 777
- b. sono ano-hito
DEM.2 he
‘that he’ Coulmas 1982: 214
- c. ano kanozyo
DEM.3 she
‘that she’ Noguchi 1997: 777

Pronouns in these languages have been argued to behave as nouns (Kuroda 1965: 105, Noguchi 1997, Déchaine & Wiltschko 2002 for Japanese and Sohn 1994 for Korean; see also chapter 4), partly because they can be modified by adjectives or possessives. Such an analysis goes some way in accounting for why these ‘personal pronouns’ can co-occur with demonstratives, marked as adnominal modifiers by the ‘genitive’ marker *-no* in Japanese. The fact that the demonstrative precedes the ‘pronominal’ also fits well with this approach, since noun phrases in both languages are generally noun-final.⁴²

The TNG language Amele also shows PPDCs with the demonstrative preceding the personal pronoun. In contrast to Japanese and Korean, however, noun phrases in Amele are noun-initial, suggesting that the PPDC cluster is located at the right edge of the *xnP* in this case, rather than on the left edge as in Japanese and Korean. Examples are provided in (49b) repeated from section 2.3.2 and (114). The double occurrence of the third person plural pronoun *age* in the latter example supports the point that we are not simply dealing with a noun phrase containing a demonstrative followed by a resumptive pronoun.

⁴² On the other hand, Japanese data like (i) where a demonstrative accompanies an APCs raise questions for such an approach. If personal pronouns in Japanese are indeed a type of noun, the marked expression in (i) would seem to contain two potential nominal heads. Against this background, Furuya (2008) suggests that (i) does not simply involve a (complex) noun accompanied by a demonstrative.

(i) Sensei-wa [**sono** watasitati/anatatati gakusei]-o suisensimasita.
teacher-TOP DEM.2 us/you(PL) student-ACC recommended
‘(Lit.) *The teacher recommended those us/you students.’ adapted from Furuya 2008: 153, (13)

The general acceptability of these sorts of APCs is unclear, however. David Hall (p.c.) tells me that his consultant did not accept the example in (i) or variations thereof, suggesting that at least in those grammars the noun-like behaviour of personal pronouns may play a crucial role in accounting for the PPDCs after all. This type of construction is unavailable in Korean (Jaehoon Choi, p.c.).

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- (49b) **Dana ben eu age** ho-ig-a. [Amele]
 man big that 3PL come-3PL-TODPST
 ‘Those leaders (big men) came.’ Roberts 1987: 210, (284)

- (114) **Dana i/eu age** age Hilu dec.
 man this/that 3PL 3PL from
 ‘These/those men are from Hilu.’ Roberts 1987: 217, (315)

The Kaera data in (115) seem to show a comparable configuration with the postnominal demonstrative preceding an adnominal pronoun.

- (115) **Ui gu gang** i. [Kaera]
 person that 3SG sick
 ‘That person is sick.’ Klamer 2014: 129, (99)

2.5.2 PPDCs with personal pronoun-demonstrative order

PPDCs with the personal pronoun preceding the demonstrative are encountered in several languages of the Pama-Nyungan and Austronesian families, as well as in Teiwa, Manambu and Hausa.

Two examples from Kayardild and Guugu Yimidhirr (both Pama-Nyungan) are provided in (116) and (117). Similarly, Patz (2002: 120) describes that pronouns can be followed by demonstratives in Kuku Yalanji examples like *nyulu yinya* ‘that one’.⁴³

- (116) **niya dathin-a dank-a** kamarri-ja thalardin-d [Kayardild]
 3SG.NOM that-NOM man-NOM ask-IMP old man-NOM
 ‘Ask him, that man, the old man!’ Evans 1995: 251, (6-37)

- (117) **Dhana yinharrin** gunbu dumbiilmbi-ga [Guugu Yimidhirr]
 3PL.NOM DEM.PROX.ABS.PL dance.ABS break.RED-PRF
 wudhuurr-bi
 night-LOC
 ‘These people would have a dance at night.’ Haviland 1979: 160

⁴³It is unclear whether Kuku Yalanji also allows the opposite order in PPDCs, as might be expected given that it has ambi-directional APCs, see section 2.3.3. For more discussion of PPDCs in Pama-Nyungan see Stirling & Baker (2007) and more generally on third person APCs see Louagie & Verstraete (2015).

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An additional example from Kala Lagaw Ya, a Pama-Nyungan language not contained in the sample, involving a personal pronoun followed by a remote demonstrative is provided in (118).

- (118) **Thana sethabi moegithap uruy-n** [Saibai, Kala Lagaw Ya]
 3PL.NOM 3PL.REMDEM tiny creature-ERG
 poyzen mabayg-aw kulka-nu wan-an
 poison person-GEN blood-LOC put-N-FUT
 ‘These tiny creatures put poison into a person’s blood.’ Stirling 2008: 193

The difference in case marking between the pronoun and the following constituent in Guugu Yimidhirr and Kala Lagaw Ya is likely due to the fact that both languages have split-ergative systems, where arguments high on the animacy scale follow an accusative system of argument marking, while lower ones follow an ergative system (see Haviland 1979 for Guugu Yimidhirr; see Round 2003 and McGregor 2009 for issues in the Kala Lagaw Ya system). This complication does not arise in Kayardild, which consistently displays accusative argument marking.

There is little data on PPDCs in the TNG language Teiwa, but Klamer (2010: 402) provides example (119) where “[t]he indefinite *uy kri nuk* ‘a respected old man’ is modified by the pronoun *ga’an* and the demonstrative *u*”.

- (119) **Uy kri nuk ga’an u,** [Teiwa]
 person respected.old.man one 3SG DIST
 g-oqai iman raq eqar nuk, masar nuk.
 3SG-child they two woman one man one
 ‘[There was] this respected old man, he had two children (lit. his children [were] two)
 a girl (and) a boy’ Klamer 2010: 402, (8)

In the Sepik language Manambu, PPDCs are explicitly described as restricted to third person, since “[o]nly a third person pronoun can be used as a modifier in noun phrases which contain a functionally unmarked distal demonstrative” (Aikhenvald 2008: 198). Aikhenvald (ibid.) characterises the meaning of such PPDCs as “akin to that of a definite article with emphatic overtones, ‘that very one’ [...]” and “a way of referring to a previously mentioned important participant.” The construction is exemplified in (120) where the initial word combines the morphemes of the personal pronoun (*lə*) and a demonstrative (*a*).

2.5 Personal pronoun-demonstrative constructions

(120) [**la** **ta:kw**] vyakət-a ta:kw ma:, [Manambu]
 she+DEM.DIST.F.SG woman good-LK woman NEG

kuprap-ə ta:kw-al
 bad-LK woman-3F.SG.NOM

‘That previously mentioned woman is not a good woman, she is a bad woman (she is an evil spirit)’Aikhenvald 2008: 198, (20.2)

While the cases discussed so far involved third person pronouns, the Austronesian languages Indonesian, Vaeakau-Taumako, Tuvaluan and Maori show PPDCs with non-third person pronouns.⁴⁴ Except for Indonesian, they all distinguish three demonstratives in a person oriented system (Anderson & Keenan 1985) and across these languages there appears to be a tendency that “the demonstrative chosen is typically that corresponding to the speech-act participant referred to by the pronoun” (Næss & Hovdhaugen 2011: 126).

This is illustrated for Vaeakau-Taumako in (121) where first person exclusive, second person and third person pronouns are used with the ‘first’, ‘second’ and ‘third person’ demonstratives respectively.⁴⁵ However, the second person demonstrative *na* as the ‘neutral’ choice can also appear with third person, since “other concerns may override the default choice, i.e. emphasis on the (unexpected) location of the referent [...] or the contrastive function of *la*” (Næss & Hovdhaugen 2011: 126).

(121) a. **mhaua ne** te memea a maua [Vaeakau-Taumako]
 1DU.EXCL DEM.1 SG.SPEC child POSS 1DU.EXCL.POSS

ko lavaki
 INC disappear

‘As for the two of us, our child has disappeared.’

b. a **koe na** no noho i hea
 PERS 2SG DEM.2 IPFV stay LDA where

‘Where were you sitting?’

c. **lhaua la** ko ahio oki ai ki te kaenga o laua
 3DU DEM.3 INC return again OBL.PRO to SG.SPEC village POSS 3DU.POSS

‘The two of them then returned to their village.’

Næss & Hovdhaugen 2011: 125, (38)

⁴⁴The absence of non-third person pronouns in the PPDCs discussed so far does not indicate that they are generally ruled out in those languages.

⁴⁵Vaeakau-Taumako uses the demonstrative *ne* for a referent near the speaker, *na* for one near the addressee and *la* for referents distant from both speech act participants (Næss & Hovdhaugen 2011: 80).

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The same partial co-dependence of the features of personal pronouns and demonstratives is illustrated for Tuvaluan in (122). As for Vaeakau-Taumako, the feature co-variation is not absolute as “combinations may occur in which first-person demonstratives modify second-person pronouns, for example, because the person of demonstratives can be governed by affective considerations” (Besnier 2000: 409).

- (122) a. **Au nei** koo fakatokatoka moo te fono [Tuvaluan]
 I DEM.1 INC prepare BEN the meeting
 a te paalamene.
 of the parliament
 ‘I am getting ready for the parliamentary session.’
- b. A ko **koutou naa** e outou iloaga i te mea teenaa
 and FOC you-PL DEM.2 N-PST you-PL know+TRN COMP the thing DEM.2
 e tapu?
 N-PST forbidden
 ‘You know it’s forbidden to do what you[’re doing]?’ Besnier 2000: 409

For Maori, Bauer (1997) notes that PPDCs are not very common, but possible in principle. She reports that her consultant “was very doubtful about [(123a); GFKH] but felt it might be possible, for instance, to resolve confusion over possible referents for *rāua*” (Bauer 1997: 263). Further constructions of this sort are textually attested, see (123bc).

- (123) a. ?Hoatu ki a **rāua rā** [Maori]
 give to PERS 3DU DEM.3
 ‘Give [it] to them there’
- b. \bar{A} , ka tahi nei rānei te wahine ka rere ki tana tāne i pai
 and TAM? then DEM.1 or the woman TAM fly to her man TAM good
 ai, ko **au nei** anake?
 PRT TOP 1SG DEM.1 alone
 ‘Am I the only woman to have flown to the man she loved?’
- c. Anō rā i ui·a atu ai, hua noa kei a **koe nā** e
 again DEM.3 TAM ask·PASS away PRT think freely at PERS 2SG DEM.2 TAM
 mau ana, ko·ia nā tō kupu hokohoko
 take TAM TOP·3SG DEM.2 your word exchange
 ‘I asked my question because I thought your words about exchange referred to what you had taken’ Bauer 1997: 263f.

2.5 Personal pronoun-demonstrative constructions

Notice that the attested examples involve first and second person pronouns, while the third person PPDC in (123a) was more problematic. If this pattern is not accidental but indicates an actual asymmetry in Maori, it would be reminiscent of the participant asymmetry observed for APCs in some languages in section 2.6.1.

In contrast to the other three Austronesian languages discussed, Indonesian only distinguishes two levels of distance in demonstratives: *ini* ‘this’ and *itu* ‘that’ (Sneddon 1996: 129). Nevertheless, it may show traces of the collocation tendencies observed before. The proximate *ini* can co-occur with first person pronouns for emphasis (124a), while distal *itu* is used with third person pronouns “to indicate location or previous mention” (Sneddon 1996: 169) as in (124b).

- (124) a. Kau kira **saya ini** pelayanmu? [Indonesian]
you.SG think I PROX your.servant
‘Do you think I am your servant?’
- b. **mereka itu**
they DIST
‘they (over there)’ or ‘they (who have been mentioned)’

Sneddon 1996: 169; gloss added

I have not found examples of PPDCs with an overt head noun in the Austronesian languages discussed here. If this is indeed a stable pattern, these languages resemble Korean and arguably Japanese in this respect and differ from the other languages in this section.

The last language with PPDCs with pronoun-demonstrative order to discuss here is Hausa. This language makes use of two types of demonstratives, NP-initial long form demonstratives and short form demonstratives that are suffixed to the nominal (Newman 2000: 150). Either type can appear in APCs as shown in (125).

- (125) a. mū mālāman-nàn [Hausa]
we teachers-DEM.1
‘we teachers’ after Newman 2000: 155
- b. shī wannàn mālāmī
he DEM.1 teacher
‘he (this) teacher’ after Newman 2000: 371

As mentioned in section 2.4.2, Hausa also allows the previous reference marker *-n* in APCs, which can co-occur with a demonstrative, see (126). This clustering of adnominal pronoun,

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demonstrative and article-like marking is unique in the data I have been able to review for this sample.⁴⁶

- (126) *shī wannàn mùtùmì-n kùwa...*
he DEM.1 man-DET PRT
'and (he) this man moreover...'
after Jaggar 2001: 331

2.5.3 PPDCs with two potential orders

Finally, there are two languages in the sample that seem to allow both potential orders in PPDCs: Pitjantjatjara and Mandarin Chinese. I briefly illustrate and discuss them in turn.

Pitjantjatjara stands out from the other Pama-Nyungan languages discussed earlier in allowing demonstratives to precede personal pronouns in PPDCs as shown for the anaphoric demonstrative *panya* with (127a) and without an overt noun (127b). In (128), on the other hand, *panya* follows the third person singular pronoun *paluru* and the head noun.

- (127) a. **Tjitji panya paluru**, ngalya pitja-nyi [Pitjantjatjara]
child ANAPH 3SG.NOM towards come-PRS
'That particular child is coming towards us.' Bowe 1990: 49, (181)
- b. Ka kunyu **panya paluru pula** ngari-ra tjirirpi-ri-ngu
and REP ANAPH 3SG.NOM 3DU.NOM lie-ANT(MERG) day-INCH-PST
'And the two of them lay down until morning.' Bowe 1990: 48, 179
- (128) **Paluru ngunytju panya** paltjatjiratja nyina-ngi
3SG.NOM mother ANAPH hungry sit-PST.IPFV
'The mother, on the other hand, was still hungry.' Bowe 1990: 51, (181)

The validity of the pronoun-demonstrative order – with (128) as the only available example – may be problematic, since the status of *paluru* (3SG.NOM) as a plain pronoun is not clear. Not only can it precede other pronouns (Bowe 1990: 47), but it seems to lose its singular number specification in such cases. In (127b) it accompanies a dual pronoun. Moreover, Bowe (1990: 48) notes that *paluru* “occurs once the identity of the referent has been well established in the discourse.” This suggests that such uses may represent a givenness marker that has evolved from a personal pronoun, rather than a personal pronoun proper. If this is the case, (128) would not actually represent a PPDC and Pitjantjatjara may only have demonstrative-personal pronoun order in PPDCs. For the lack of clearer data, I leave this question to further research.

⁴⁶But keep in mind that *-n* is not a definite article, see Newman (2000: 143) and section 2.4.2.2.

2.5 Personal pronoun-demonstrative constructions

In Mandarin, demonstratives may precede personal pronouns as in (129). No additional noun is allowed in such constructions and their meaning seems to be something like ‘this (aspect/behaviour of) me’ as in *I like this new me*.

- (129) a. zhe-ge wo / na-ge wo
DEM.1-CLF 1 / DEM.2-CLF 1
‘this/that (aspect of) me’
- b. zhe-ge ta / na-ge ta
DEM.1-CLF 2 / DEM.2-CLF 2
‘this/that (aspect of) you’

The less restricted option with a demonstrative following the personal pronoun occurs with overt nominals (130). According to my consultant, this can be used to stress the contrast between groups or reactivate a previously mentioned group of referents. Notice that the distal demonstrative *naxie* is degraded with first and second person pronouns (130de), which is reminiscent of the collocations observed in Austronesian languages above and possibly due to semantic incompatibilities.

- (130) a. ta-men zhe-xie xuesheng [Mandarin Chinese]
3-PL DEM.1-CLF student
‘they these students’
- b. ta-men na-xie xuesheng
3-PL DEM.2-CLF student
‘they those students’
- c. wo-men zhe-xie xuesheng
1-PL DEM.1-CLF student
‘we these students’
- d. %wo-men na-xie xuesheng
1-PL DEM.2-CLF student
- e. %ni-men na-xie xuesheng
1-PL DEM.2-CLF student

A naturally occurring example of such an expression is (131), where the speaker may distinguish themselves from the people being addressed.

- (131) Ni-men zhe-xie nianqingren zhidao Wang ma?
2-PL DEM.1-CLF young.people know Wang Q
'Do you young people know Wang?'

This concludes the presentation of PPDC data, aspects of which are further discussed in chapter 7.

2.6 Asymmetries in person and number

Some, but not all languages in the survey show restrictions with respect to the person or number features of the pronominal forms allowed to appear in APCs. This section provides an overview of the relevant findings.

2.6.1 Person asymmetry

An asymmetry between participant (i.e. any person involving author or addressee of an utterance) and non-participant denoting pronouns (third and, where applicable, fourth/obviate person) can be easily observed in the English APCs in (132).

- (132) a. we linguists
b. you linguists
c. *they linguists

While this asymmetry between participant denoting and non-participant denoting APCs is crosslinguistically well attested, it is not universal. Indeed, there are varieties of English allowing *them linguists* (Déchaine & Wiltschko 2002, Panagiotidis 2002, Sommerstein 1972). Cardinaletti & Starke (1999a) argue that *them* should be analysed as a demonstrative in such cases (cf. also Roehrs 2005 and Bernstein 2008a).⁴⁷ While I treat English according to the pattern in (132), varieties with *them linguists* would be classified in the present typology as having third person APCs of a type where demonstratives are used as third person pronouns, see section 2.6.1.2.

The central observation of this section is that while there are reasonable attestations of languages with and without participant/non-participant asymmetries in the sample, no systematic instances of asymmetries between first and second person APCs have been encountered.⁴⁸ Below, I first consider two types of participant/non-participant asymmetries attested

⁴⁷See also Harris (1991: 23) (via Radford (1993: 109)) for a demonstrative use of the nominative form *they* in a Devonshire variety: *Tell Cooper to shift they stones there.*

⁴⁸Exclamative APCs like English *you idiot!* vs. **I idiot!* are outside the scope of this thesis, see chapter 1.

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in the current dataset before turning to languages with APCs in all persons and languages where the available data were not clear.

2.6.1.1 Languages with participant/non-participant asymmetries

Several languages in the survey follow the English-type pattern where third person pronouns are excluded in APCs. Table 2.25 illustrates that this asymmetry between participant denoting and non-participant denoting pronouns is attested in a variety of language families.⁴⁹ The column *Number* indicates which type of number restriction is attested in APCs of a given language (see below), the column *Article* shows whether the language has articles. If the article occurs in APCs, the column *In APCs* is ticked.

Table 2.25: Languages without 3rd person APCs

Language	Classification	Number	Article	In APCs
Cair. Egypt. Arabic	Afroasiatic, Semitic	non-sg	✓ (agree)	✓
Gulf Arabic	Afroasiatic, Semitic	non-sg	✓ (agree)	✓
Maltese	Afroasiatic, Semitic	all	✓ (agree)	✓
Welsh	IE, Celtic, Brythonic	non-sg	✓	✗
Dutch	IE, Germanic, West	non-sg	✓	✗
English	IE, Germanic, West	non-sg	✓	✗
German	IE, Germanic, West	all	✓	✗
Catalan	IE, Romance, Iberian	non-sg	✓	✓
Spanish	IE, Romance, Iberian	non-sg	✓	✓
Galician	IE, Romance, Iberian	non-sg	✓	✓
Italian	IE, Romance, Italo	all	✓	✗
Northern Calabrian	IE, Romance, Italo	all	✓	✗
Southern Calabrian	IE, Romance, Italo	all	✓	✗
Russian	IE, Slavic, East	non-sg	✗	NA
Polish	IE, Slavic, West	non-sg	✗	NA
Bulgarian	IE, Slavic, South	non-sg	✓	✓
Hungarian	Uralic	non-sg	✓	✗
Finnish	Uralic, Finnic	non-sg	✗	NA
Lezgian	North East Caucasian	unclear (+pl)	✗	NA

⁴⁹For Catalan, Hualde (1992: 290) provides the example *ells els pagesos* ‘they the peasants’, although two consultants indicate that this requires an appositive intonation, in contrast to first and second person plural examples. Here, I classify Catalan as lacking third person APCs along with the other Ibero-Romance languages, although I do not consider the issue settled. See also chapter 5 section 5.1.2.

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The other, albeit rare asymmetry between participants and non-participants attested in the sample is the opposite of the pattern just described. While the above languages rule out third person APCs, the languages in Table 2.26 have been described as allowing third person APCs *only*.⁵⁰

Table 2.26: Languages claimed to only have third person APCs

Language	Classification	Number	Article	In APCs
Wari'	Chapakuran	unclear	✗	NA
Adang	TNG, TAP, Alor	N/A ⁵¹	✓	?
Sawila	TNG, TAP, Alor	N/A ⁵¹	?	?
Wersing	TNG, TAP, Alor	unclear	✓	optional

For Wari', not only do only third person emphatic pronouns appear in APC-like configurations (Everett & Kern 1997: 310), but Everett & Kern (1997: 303) also claim that this construction is restricted to left dislocated positions.

- (133) Wirico Mon' co pa' na mijac [Wari']
 EMPH:3SG.M M:name INFL:M/F.RP/P kill 3SG:RP/P pig
 'It was Mon' who killed a pig.' Everett & Kern 1997: 303, (570a)

Adnominal pronouns in Adang are even more restricted. Reportedly, third person object pronouns (optionally) occur only with proper names (Robinson & Haan 2014: 261) as illustrated by the contrast in grammaticality in (134). While the third person object pronoun is licit following the proper name in (134a), the sentence with a common noun object is only grammatical without the adnominal pronoun. In contrast to Wari', it is not clear whether there are special restrictions regarding the position of the construction within the clause.

- (134) a. Sa [Bain ?ari]_{NP} bɛh. [Adang]
 3SG.SBJ Bain 3.OBJ hit
 'S/he hit Bain.' Robinson & Haan 2014: 261, (165)
- b. Sa [sɔ ?ɔb ?ari (*?ari)]_{NP} bɛh.
 3SG.SBJ 3.REFL.POSS woman 3.OBJ hit
 'He hit his wife.' Robinson & Haan 2014: 261, extrapolated from (167/8)

⁵⁰However, none of the sources provide evidence indicating the ungrammaticality of non-third person APCs. Indeed, just before printing František Kratochvíl (p.c.) confirmed to me that Sawila is actually likely to allow instances of first and second person APCs.

⁵¹There is no number distinction for the third person pronouns attested in APCs.

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Norwegian	IE, Germanic, North	(✓)	non-sg (+3sg)	✓	✗
Danish	IE, Germanic, North	(✓)	non-sg (+3sg)	✓	✗
Icelandic	IE, Germanic, North	(✓)	non-sg (+3sg)	✓	✗
Swedish	IE, Germanic, North	(✓)	non-sg (+3sg)	✓	✗

Discounting these ambiguous cases, several languages are reported to have APCs in all persons, see Table 2.28. Recall that the column *Articles* indicates the existence of a distinct article. The language Ndyuka is marked as ✗ because although it has articles they are formally identical to the third person pronouns (see section 2.4.1). The lower part of the list contains the languages with clitic person marking for which no specific APC data is available (in contrast to Bilua and Yagaria). For further details, particularly about the status of articles in Khoekhoe, as well as examples the reader is referred to section 2.3.4. Some examples are provided below in (136).

Table 2.28: Languages reported to allow APCs with all persons

Language	Classification	Number	Article	In APCs
Japanese	Isolate	non-sg	✗	NA
Evenki	Tungusic	all	✗	NA
Warlpiri	Pama-Nyungan, Ngarrkic	all	✗	NA
Kayardild	Tangkic	all	✗	NA
Imonda	Border	N/A	✗	NA
Manambu	Sepik, Ndu	all	✗	NA
Yagaria	TNG, Kainantu-Goroka	all	✗	NA
Amele	TNG, Madang	all	✗	NA
Kobon	TNG, Madang	all	✗	NA
Hausa	Afroasiatic, Chadic	all	(✓)	optional
Maori	Austronesian, Oceanic	all	✓	✓
Tuvaluan	Austronesian, Oceanic	all	✓	✓
Ndyuka	Creole, English-based	non-sg	✗(=3rd)	✗
Nigerian Pidgin	Creole, English-based	all	✓(opt.?)	✗
Kristang	Creole, Portuguese	non-sg	✗	NA
Kannada	Dravidian	non-sg?	✗	NA
Malayalam	Dravidian	non-sg?	✗	NA
Tamil	Dravidian	non-sg	✗	NA

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Romanian ⁵⁴	IE, Romance, East	all	✓	✓
Babungo	Niger-Congo, Grassfields B.	all	✗	NA
Koromfe	Niger-Congo, Gur	all	✓	(✓)
Abkhaz	North West Caucasian	unclear	✓	✓
Mandarin	Sino-Tibetan, Chinese	non-sg	✗	NA
Alamblak	Sepik, Sepik Hill	all?	✗	NA
Cl. Nahuatl	Uto-Aztecan	all	✗?	NA
Fore	TNG, Kainantu-Goroka	all	✗	NA
Hua	TNG, Kainantu-Goroka	all	✗	NA
Khoekhoe	Central Khoesan	all	(✗)	✓

- (136) a. kare-ra tetugakusya [Japanese]
 he-PL philosopher
 ‘they philosophers’⁵⁵ Noguchi 1997: 780, (40c)
- b. Numai ei oamenii de afaceri și nu ceilalți știau [Romanian]
 only they men.DEF of business and not others knew
 advaărul.
 truth.DEF
 ‘Only they the businessmen and not the other ones knew the truth.’
 after Cornilescu & Nicolae 2014: 20, (50a)
- c. ŋarka njanuŋu ka puła-mi [Warlpiri]
 man 3 PRS shout-N-PST
 ‘The aforementioned man is shouting.’⁵⁶ Hale 1973: 316, (22)
- d. [[mən Yuasəsəg] [wun Yuanəg] wa [lə Ñamamayrata:kw] [Manambu]
 you.M Yuasəsəg I Yuanəg and she Ñamamayratakw
 ñan gwalugw nak] [Maliau-adian]
 we clan one Maliau-1PL.NOM
 ‘You Yuasəsəg, I Yuanəg, and she Ñamamayratakw we (belong to) one clan, we
 are Maliau’ Aikhenvald 2008: 511, (20.11)

⁵⁴According to Mallinson (1986: 258) APCs in Romanian are “normal for 1st person plural, not uncommon for 2nd person plural but uncommon for other person/number combinations.” Cornilescu & Nicolae (2014: 20), on the other hand, provide examples showing APCs of all person-number combinations, see e.g. (136). This illustrates that the less common person-number combinations of APCs may be underreported, which could necessitate future revisions to these classifications.

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The Dravidian languages Kannada, Malayalam and Tamil actually use demonstrative pronouns as third person pronouns. I nevertheless classify them as having proper third person APCs, since their demonstrative pronouns are formally distinct from their adnominal demonstratives. In Malayalam, for example, the adnominal demonstrative modifiers are proximate *ii* ‘this’ and distal *aa* ‘that’ (Asher & Kumari 1997: 125). The demonstrative pronouns also display the *i/a* contrast, but contain additional material, cf. *aval* ‘she.PROX’ versus *ival* ‘she.DIST’ (Asher & Kumari 1997: 258). An example of the demonstrative modifier is provided in (137a) and one of an adnominal pronoun in (137b).

- (137) a. *ii pustakaṅṅa* [Malayalam]
PROX books
‘these books’ Asher & Kumari 1997: 125
- b. *avarə prataapika* *namma* *le kaṅṅaal ariyilla*
they majestic-PL we(INCL)-ACC see-COND know-FUT-NEG
‘They, the majestic, won’t recognise us if they see us.’
Asher & Kumari 1997: 263, (1344)

Insofar as adnominal demonstratives are formally distinguished from pronominal ones in these languages, they do not raise the same analytical problem as the languages in Table 2.27.

Most languages without person restrictions seem to either employ demonstratives as third person pronouns or, more interestingly, lack (overt) articles. This opens up the possibility that in line with the pronominal determiner analysis third person APCs are available when there is no article competing for the same position. Furthermore, the languages with third person APCs that do in fact have articles require them in APCs as well, see also section 2.4, suggesting that these are cases where Postal’s (1969) pronominal determiner analysis does not apply or requires modifications anyway, see Höhn 2016 and chapter 4. The generalisation (138) captures these observations, which are further discussed in chapter 5 section 5.2.⁵⁷

(138) *Third person-article generalisation:*

If a language has third person APCs and distinct definite articles, it has articles in APCs.

⁵⁵*Pace Hinds*’s (1988, 261) claim that “[t]his construction does not occur with second or third person reference.”

⁵⁶Glossing added in correspondence with surrounding examples.

⁵⁷The restriction to distinct definite articles rules out languages with third person pronouns acting as articles, see section 2.4.1.

2.6.1.3 Languages that may have no person restriction

For a number of languages, the grammatical descriptions suggest that they allow APCs of all persons, but are not specific enough about it to be sure. I list these in Table 2.29, while noting that some of them might fall into a different category on closer inspection. The column labelled *Person* indicates for which persons APCs are attested in the surveyed data.

Table 2.29: Languages likely to allow APCs in all person forms

Language	Classification	Person	Number	Article	In APCs
Korean	Isolate	+12	non-sg	✗	NA
Guugu Yimidhirr	Pama-Nyungan, Yim-Yal-Yid.	+3	all?	✗	NA
Kuku Yalanji	Pama-Nyungan, Yim-Yal-Yid.	+23	all?	✗	NA
Pitjantjatjara	Pama-Nyungan, Wati	+3	all?	✗	NA
Usan	TNG, Madang	+3	all?	✓	?
Kamang	TNG, TAP, Alor	+3	N/A	✓	?
Kaera	TNG, TAP, Pantar	+3	all? ⁵⁸	✗?	NA
Mupun	Afroasiatic, Chadic	+3	all?	✓	✓
Indonesian	Austronesian, Malay	+1	all?	✗	NA
Kwaio	Austronesian, Oceanic	+13	unclear	✓?	?
Kambaata	Afroasiatic, Cushitic	+12(3?)	unclear (+pl)	✓?	✗

In addition to examples for first and second person APCs in Kambaata, Yvonne Treis (p.c.) kindly provided me with the third person plural example in (139). Although this may suggest that APCs lack person restrictions in the language, it should be ascertained whether the same structure is possible with a lexical noun instead of or in addition to the numeral.

- (139) **Isso’oot lamunku** Yesuusi resha orooss... [Kambaata]
 3PL.NOM two.M.NOM<N> Jesus.M.GEN corpse.M.ACC take.out.3F.PCO
 ‘They (lit. “they two”) took out the body of Jesus...’ St. John 19, 40

Finally, for the languages in Table 2.30 the descriptions do not provide any indication as to whether APCs are possible for persons other than the example provided.

2.6.2 Number asymmetry

In addition to the asymmetry between participant-denoting APCs and non-participant-denoting APCs discussed above, English also exhibits a clear distinction between singular and plural APCs. Leaving aside the issue of case variation (but see Parrott 2009), expressions like (140ab)

A survey of non-possessive nominal person marking

Table 2.30: Languages with unclear status of person restrictions

Language	Classification	Person	Number
Nkore-Kiga	Niger-Congo, Bantu	+1	all? (+pl)
Supyire	Niger-Congo, Gur	+3	no-sg?
Western Pantar	TNG, TAP, Pantar	+3	all
Awtuw	Sepik, Ram	+3	all
Diyari	Pama-Nyungan, Karna	+3	all

are grammatical in English. On the other hand, the corresponding singular expressions in (140bc) are decidedly bad.

- (140) a. We/us linguists like exotic grammars.
 b. We/us linguists organised a conference last week.
 c. *I linguist like exotic grammars.
 d. *I linguist organised a conference last week.

In the previous literature this issue has mostly been discussed for English (Bernstein 2008b, Delorme & Dougherty 1972), German (Rauh 2004) or Japanese (Furuya 2008, Inokuma 2009) with occasional reference to a general, maybe even universal tendency for such a number asymmetry, see in particular Pesetsky (1978).⁵⁹ Of course, German data like (141) show that singular APCs are not universally ruled out.

- (141) An mich Bahnfahrer denkt hier keiner! [German]
 on me rail.rider think.3SG here nobody
 ‘Nobody here’s thinking of me who am a regular train user!’⁶⁰

In parallel to the previous discussion of person asymmetries, this section describes the distribution of APCs with respect to number for the languages in the sample. The core contrast considered is between singular and non-singular APCs, for which the available data provide a relatively clear picture. This does not exclude the possibility that there may be further asymmetries in languages with more than one non-singular value, e.g. plural and

⁵⁹Cf. also Torrego (1996: 115f.) for similar thoughts on the singular-plural asymmetry in the unagreement phenomenon in Spanish.

⁶⁰From http://reisen.ciao.de/DB_allgemein__Test_999872 accessed on 23 August 2015.

dual.⁶¹ While I have not come across clear cases of languages allowing plural, but no dual APCs, this may have been due to the limited detail provided in the sources.⁶²

2.6.2.1 APCs restricted to non-singular

Table 2.31 lists the languages which do not allow singular APCs in line with the familiar English pattern. The table also indicates the person restrictions observed for each language and whether demonstratives are used as third person pronouns.

A caveat concerns the status of languages where demonstratives are used as third person pronouns, since the adnominal uses of those demonstratives/personal pronouns are usually also available in the singular. This corresponds to a distribution of APCs for person and number which can be sketched as in (142).

(142)

	sg	non-sg
1	✗	✓
2	✗	✓
3	✓	✓

The Scandinavian languages, Norwegian, Swedish, Danish and Icelandic show a version of this distribution (143). While they do not normally allow singular argumental APCs, special constructions are available with third person singular pronouns which may be classified as APCs or demonstrative constructions. Third person plural pronouns tend to be similar, but not always identical to the respective demonstrative pronouns in Scandinavian, so the status of third person plural APCs is debatable, see chapter 5 section 5.2.2.

(143)

	sg	non-sg
1	✗	✓
2	✗	✓
3	✓	✗(or ✓?)

In Table 2.32, I list further languages for which the available descriptions and data were not entirely clear, but nonetheless suggest that APCs are restricted to non-singular uses.

⁶¹Thanks to Greville Corbett for pointing this out.

⁶²Indeed, the person suffixes in Yagaria discussed in section 2.3.4.3 present a potential exception, since second and third person plural suffixes are unattested in the language, while distinct singular and dual morphemes are available.

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Table 2.31: Languages that restrict APCs to non-singular

Language	Classification	Person	3rd=Dem
Japanese	Isolate	all	✗
Korean	Isolate	all?	✗
Turkish	Turkic	all	✓
Mangarayi	Gunwingguan	all	✓
Ndyuka	Creole, English-based	all	✗
Kristang	Creole, Portuguese-based	all (+1, ?23)	✗
Tamil	Dravidian	all	✗
Persian	IE, Indo-Iranian	all	✓
Mandarin	Sino-Tibetan, Chinese	all	✗
Cair. Egypt. Arabic	Afroasiatic, Semitic	no 3	✗
Gulf Arabic	Afroasiatic, Semitic	no 3	✗
Welsh	IE, Celtic, Brittonic	no 3	✗
Norwegian	IE, Germanic, North	no 3 (exc. sg)	(✓)
Danish	IE, Germanic, North	no 3 (exc. sg)	(✓)
Swedish	IE, Germanic, North	no 3 (exc. sg)	(✓)
Icelandic	IE, Germanic, North	no 3 (exc. sg)	(✓)
Dutch	IE, Germanic, West	no 3	✗
English	IE, Germanic, West	no 3	✗
Catalan	IE, Romance, Iberian	no 3	✗
Galician	IE, Romance, Iberian	no 3	✗
Spanish	IE, Romance, Iberian	no 3	✗
Russian	IE, Slavic, East	no 3	✗
Polish	IE, Slavic, West	no 3	✗
Bulgarian	IE, Slavic, South	no 3	✗
Hungarian	Uralic	no 3	✗
Finnish	Uralic, Finnic	no 3	✗

Table 2.32: Languages that may restrict APCs to non-singular

Language	Classification	Person	3rd=Dem
Kashmiri	IE, Indo-Aryan	all	✓
Marathi	IE, Indo-Aryan	all	✓
Punjabi	IE, Indo-Aryan	all	✓
Kannada	Dravidian	all	✗

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Malayalam	Dravidian	all	✗
Supyire	Niger-Congo, Gur	unclear (+3)	✗

2.6.2.2 APCs without number restriction

The sample contains a large number of languages without strict restrictions against singular APCs, listed in Table 2.33. The final four languages are those for which data is available on clitic person marking, but not APCs (section 2.3.4).

Table 2.33: Languages without number restriction in APCs

Language	Classification	Person	3rd=Dem
Evenki	Tungusic	all	✗
Warlpiri	Pama-Nyungan, Ngarrkic	all	✗
Kuku Yalanji	Pama-Nyungan, Yim-Yal-Yid.	all?	✗
Kayardild	Tangkic	all	✗
Bilua	Central Solomons	all	✓
Manambu	Sepik, Ndu	all	✗
Yagaria	TNG, Kainantu-Goroka	all	✗
Kobon	TNG, Madang	all	✗
Amele	TNG, Madang	all	✗
Hausa	Afroasiatic, Chadic	all	✗
Maori	Austronesian, Oceanic	all	✗
Tuvaluan	Austronesian, Oceanic	all	✗
Nigerian Pidgin	Creole, English-based	all	✗
Kalaallisut	Eskimo-Aleut	all	✓
Basque	Isolate	all	✓
Calabrian Greek	IE, Hellenic	all	✓
Std. Mod. Greek	IE, Hellenic	all	✓
Romanian ⁶³	IE, Romance, East	all	✗
Babungo	Niger-Congo, Grassfields Bantu	all	✗
Koromfe	Niger-Congo, Gur	all	✗
<hr/>			
Maltese	Afroasiatic, Semitic	no 3	✗
German	IE, Germanic, West	no 3	✗
Italian	IE, Romance, Italo	no 3	✗

⁶³I follow Cornilescu & Nicolae (2014) rather than Mallinson (1986) here, see footnote 54.

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Southern Calabrese	IE, Romance, Italo	no 3	✗
Northern Calabrian	IE, Romance, Italo	no 3	✗
Western Pantar	TNG, TAP, Pantar	unclear (+3)	✗
Awtuw	Sepik, Ram	unclear (+3)	
Diyari	Pama-Nyungan, Karna	unclear? (+3)	✗
Cl. Nahuatl	Uto-Aztecan	all	✗
Fore	TNG, Kainantu-Goroka	all	✗
Hua	TNG, Kainantu-Goroka	all	✗
Khoekhoe	Central Khoesan	all	✗

Some examples of singular APCs not presented before are provided in (144).

- (144) a. Si beje mine-ve sa:-0-nni. [Evenki]
 you man I-ACC.DEF know-N-FUT-2SG
 (lit.) ‘You, man, (should) know me.’ Nedjalkov 1997: 199, (791)
- b. Au ttino poto koo leva ne iloa nee au mea [Tuvaluan]
 I the+person intelligent PFV know ERG I thing
 kolaa faatoaa iloa nee koe ttagata valea.
 those just know ERG you the+man stupid
 ‘I, an intelligent person, have long known what you, stupid man, are just discovering.’
 Besnier 2000: 393, (2018)
- c. Jien il-ħmar insejt nieħu biljett [Maltese]
 I the-donkey forgot-1SG take-1SG ticket
 ‘I stupidly forgot to buy a ticket.’
 Borg & Azzopardi-Alexander 1997: 202, (914)
- d. Tu studente dovresti avere delle opinioni. [Std. Italian]
 You student should.2SG have some opinions
 ‘You student should have some opinions.’

The languages in Table 2.34 lack a number distinction on the pronouns that are confirmed to occur in APCs and therefore lack number restrictions on APCs for technical reasons.

As mentioned earlier, for a number of languages I have no clear information about APC number restrictions. Based on circumstantial evidence (suggestive phrasing in the grammatical description, behaviour of related languages), the languages in Table 2.35 may also lack

2.6 Asymmetries in person and number

Table 2.34: Languages without number distinction in observed APCs

Language	Classification	Person	3rd=Dem
Imonda	Border	all	✗
Sawila	TNG, TAP, Alor	only 3	✗
Adang	TNG, TAP, Alor	proper names	✗
Kamang	TNG, TAP, Alor	all? (+3)	✗

number restrictions on APCs. Finally, for the languages Table 2.36 there is not enough data available for even a tentative statement about possible number restrictions to APCs.

Table 2.35: Languages that may have no number restriction in APCs

Language	Classification	Number	Person	3rd=Dem
Pitjantjatjara	Pama-Nyungan, Wati	+sg	all? (+3)	✗?
Guugu Yimidhirr	Pama-Nyungan, Yim-Yal-Yid.	+pl	all? (+3)	✗
Mupun	Afroasiatic, Chadic	+sg	all? (+ 3)	✗
Nkore-Kiga	Niger-Congo, Bantu	+pl	unclear (+1)	✗
Indonesian	Austronesian, Malayic	+pl	all? (+1)	✗
Usan	TNG, Madang	+sg	all? (+3)	✗
Kaera	TNG, TAP, Pantar	+sg	all? (+3)	✗
Alamblak	Sepik, Sepik Hill	+pl	all	✗

Table 2.36: Languages with unclear number restrictions in APCs

Language	Classification	Number	Person	3rd=Dem
Abkhaz	North West Caucasian	+pl	all	✗
Lezgian	North East Caucasian	+pl	no 3	(✓)
Kwaio	Austronesian, Oceanic	+pl	all? (+13)	✗
Lavukaleve	Central Solomons	+pl	all	✓
Wari'	Chapakuran	+sg	only 3	✗
Wersing	TNG, TAP, Alor	+du	only 3	✗
Kambaata	Afroasiatic, Cushitic	+pl	all?	✗

2.6.3 Summary

The observations of this section are summarised in Table 2.37. The columns indicate the number of languages without person restrictions (**All**), with a lack of third person APCs (**No 3**) and with only third person APCs (**No 1/2**). For languages in the **All** persons category, there are three subdistinctions for languages using demonstratives as third person pronouns (**3rd=Dem**), those with distinct third person pronouns (**3rd≠Dem**) and languages for which inclusion in this category seems likely but not entirely clear. The rows provide information about the number of languages with APCs in all persons (**All num**) and those without singular APCs. Cases where the available description was suggestive but not very clear are counted separately (**All num?**, **No sg?**), as are languages where no number distinctions are made in the relevant pronominals (**N/A**) and languages where the status of number restrictions is unclear.

Table 2.37: Person and number restrictions in APCs

	3≠Dem	All All?	3=Dem	No 3	No 1/2	Unclear	Total
All num	18	1	5	5	–	3	32
All num?	1	6	–	–	–	1	8
No sg	5	1	7	13	–	–	26
No sg?	2	–	3	–	–	1	6
N/A	1	1	–	–	2	–	4
Unclear	1	2	1	1	2	–	7
Total	28	11	16	19	4	5	83

As in section 2.3, compressing the data by genus can help to counteract the overrepresentation of some families (notably Indo-European) in the sample. This method leads to double counts, since, for example, some Germanic languages allow third person APCs, while the majority does not. Consequently, this family is counted twice, once in the category **All (3≠Dem)** and once in **No 3**. Since this effect would proliferate in a combined table like Table 2.37, I present the compressed data for person and number restrictions separately below. Table 2.38 presents a detailed overview by genus and Table 2.39 provides the individual counts for each type of person restriction and a combined count of the genera with confirmed or tentative lack of person restrictions (**All**, **3≠Dem** and **All?**) which avoids counting the same genus twice.

2.6 Asymmetries in person and number

Table 2.38: Person restrictions in APCs by genus

Family	All			No 3	No 1/2	Unclear
	3≠Dem	All?	3=Dem			
Chapakuran					✓	
Japanese (isolate)	✓					
Korean (isolate)		✓				
Tungusic	✓					
Turkic			✓			
Gunwingguan			✓			
Pama-Nyungan, Ngarrkic	✓					
Pama-Nyungan, Wati		✓				
Pama-Nyungan, Yim-Yal-Yid.		✓				
Pama-Nyungan, Karna						✓
Tangkic	✓					
Central Solomons			✓			
Border	✓					
Sepik, Ndu	✓					
Sepik, Ram						✓
Sepik, Sepik Hill	✓					
TNG, Kainantu-Goroka	✓					
TNG, Madang	✓	✓				
TNG, TAP, Alor		✓			✓	
TNG, TAP, Pantar		✓				✓
Austronesian, Malayic		✓				
Austronesian, Oceanic	✓	✓				
Afroasiatic, Chadic	✓	✓				
Afroasiatic, Cushitic		✓				
Afroasiatic, Semitic				✓		
Niger-Congo, Bantu						✓
Niger-Congo, Grassfields Bantu	✓					
Niger-Congo, Gur	✓					✓
Central Khoesan	✓					
Ndyuka (Creole)	✓					

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Table 2.38: (continued)

Family	All			No 3	No 1/2	Unclear
	3≠Dem	All?	3=Dem			
Nigerian Pidgin (Creole)	✓					
Kristang (Creole)	✓					
Eskimo-Aleut			✓			
Dravidian	✓					
IE, Celtic				✓		
IE, Germanic			(✓)	✓		
IE, Hellenic			✓			
IE, Indo-Aryan			✓			
IE, Indo-Iranian			✓			
IE, Romance	✓			✓		
IE, Slavic				✓		
Basque (isolate)			✓			
Sino-Tibetan, Chinese	✓					
Uralic				✓		
Uralic, Finnic				✓		
North East Caucasian				✓		
North West Caucasian	✓					
Uto-Aztecan	✓					
Total	22	10	9	8	2	5

Table 2.39: Person restrictions in APCs (compressed)

3≠Dem	All		No 3	No 1/2	Unclear
	All?	3=Dem			
22	10	9	8	2	5
29					

Maybe somewhat surprisingly, the English-type pattern where nominal person is restricted to participant-denoting APCs is only attested in 8 genera, while the pattern without person restrictions is found in 22, or even 29 if we include the **All?** category. I disregard the group of languages where demonstratives are used as third person pronouns for the reasons discussed regarding Table 2.27 on page 87.

2.6 Asymmetries in person and number

The genera appear to pattern very consistently in that there are almost no cases where two languages from the same genus show contradictory values. The Germanic languages tentatively belonging to the **3=Dem** category are the Scandinavian languages with their special demonstrative uses of third person pronouns (chapter 5 section 5.2.2), and as just mentioned the status of **3=Dem** languages with respect to person restrictions is ambiguous. Leaving aside the Indo-European languages in the **3=Dem** category, the person restrictions on APCs in Indo-European appear remarkably homogenous with the exception of Romanian.⁶⁴

Turning to the number restrictions on APCs, Table 2.40 offers an overview by genus and treating these data the same way as the person restrictions above yields the individual and combined data reported in Table 2.41.

Table 2.40: Number restrictions in APCs by genus

Family	All num	All num?	No sg	No sg?	N/A	Unclear
Chapakuran						✓
Japanese (isolate)			✓			
Korean (isolate)			✓			
Turkic			✓			
Tungusic	✓					
Pama-Nyungan, Ngarrkic	✓					
Pama-Nyungan, Wati		✓				
Pama-Nyungan, Karna	✓					
Pama-Nyungan, Yim-Yal-Yid.	✓	✓				
Gunwinguan			✓			
Tangkic	✓					
Central Solomons	✓					✓
Border					✓	
Sepik, Ndu	✓					
Sepik, Ram	✓					
Sepik, Sepik Hill		✓				
TNG, Kainantu-Goroka	✓					
TNG, Madang	✓	✓				
TNG, TAP, Alor					✓	✓
TNG, TAP, Pantar	✓	✓				
Austronesian, Malayic		✓				

⁶⁴Recall footnotes 49 and 54.

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Table 2.40: (continued)

Family	All num	All num?	No sg	No sg?	N/A	Unclear
Austronesian, Oceanic	✓					✓
Afroasiatic, Chadic	✓	✓				
Afroasiatic, Cushitic						✓
Afroasiatic, Semitic	✓		✓			
Niger-Congo, Bantu		✓				
Niger-Congo, Grassfields Bantu	✓					
Niger-Congo, Gur	✓			✓		
Central Khoesan	✓					
Ndyuka (Creole)			✓			
Nigerian Pidgin (Creole)	✓					
Kristang (Creole)			✓			
Eskimo-Aleut	✓					
Dravidian			✓	✓		
IE, Celtic			✓			
IE, Germanic	✓		✓			
IE, Hellenic	✓					
IE, Indo-Aryan				✓		
IE, Indo-Iranian			✓			
IE, Romance	✓		✓			
IE, Slavic			✓			
Basque (isolate)	✓					
Sino-Tibetan, Chinese			✓			
Uralic			✓			
Uralic, Finnic			✓			
North East Caucasian						✓
North West Caucasian						✓
Uto-Aztecan	✓					
Total	24	8	16	3	2	7

Languages without number restrictions for APCs appear in 24 genera, or 28 including the tendential cases. This pattern is more common than that which allows only non-singular APCs, appearing in 16 or 18 language families in the sample, although the difference is not

2.6 Asymmetries in person and number

Table 2.41: Number restrictions in APCs (compressed)

All num	All num?	No sg	No sg?	N/A	Unclear
24	8	16	3	2	7
	28		18		

as large as the split among person restrictions. At the same time, genera pattern somewhat less consistently than with respect to person restrictions. Of the Semitic, Gur, Germanic and Romance families, some languages are restricted to non-singular APCs and others show no such restriction.

The attested patterns of person-number combinations are schematised as in (145)-(150) below.

<p>(145) <u>All pers., all #</u></p> <table style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="border-right: 1px solid black;"></th> <th style="border-right: 1px solid black;">sg</th> <th>non-sg</th> </tr> </thead> <tbody> <tr> <td style="border-right: 1px solid black;">1</td> <td style="border-right: 1px solid black;">✓</td> <td>✓</td> </tr> <tr> <td style="border-right: 1px solid black;">2</td> <td style="border-right: 1px solid black;">✓</td> <td>✓</td> </tr> <tr> <td style="border-right: 1px solid black;">3</td> <td style="border-right: 1px solid black;">✓</td> <td>✓</td> </tr> </tbody> </table>		sg	non-sg	1	✓	✓	2	✓	✓	3	✓	✓	<p>(146) <u>All pers., non-sg</u></p> <table style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="border-right: 1px solid black;"></th> <th style="border-right: 1px solid black;">sg</th> <th>non-sg</th> </tr> </thead> <tbody> <tr> <td style="border-right: 1px solid black;">1</td> <td style="border-right: 1px solid black;">✗</td> <td>✓</td> </tr> <tr> <td style="border-right: 1px solid black;">2</td> <td style="border-right: 1px solid black;">✗</td> <td>✓</td> </tr> <tr> <td style="border-right: 1px solid black;">3</td> <td style="border-right: 1px solid black;">✗</td> <td>✓</td> </tr> </tbody> </table>		sg	non-sg	1	✗	✓	2	✗	✓	3	✗	✓	<p>(147) <u>No 3, all #</u></p> <table style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="border-right: 1px solid black;"></th> <th style="border-right: 1px solid black;">sg</th> <th>non-sg</th> </tr> </thead> <tbody> <tr> <td style="border-right: 1px solid black;">1</td> <td style="border-right: 1px solid black;">✓</td> <td>✓</td> </tr> <tr> <td style="border-right: 1px solid black;">2</td> <td style="border-right: 1px solid black;">✓</td> <td>✓</td> </tr> <tr> <td style="border-right: 1px solid black;">3</td> <td style="border-right: 1px solid black;">✗</td> <td>✗</td> </tr> </tbody> </table>		sg	non-sg	1	✓	✓	2	✓	✓	3	✗	✗
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Pattern (150) is exceedingly rare and only attested in the four languages listed in Table 2.26 above, so it is not clear whether it is real and relevant to the discussion of APCs. Apart from the possibility of gaps in the descriptions of the four relevant languages, it may be that the structure of these constructions differs significantly from that of ‘regular’ APCs. I leave these data aside for future research.

The tables in (151)-(155) illustrate several theoretically possible patterns that are not attested in the data.

A survey of non-possessive nominal person marking

<p>(151) <u>All pers., only sg</u></p> <table style="width: 100%; border-collapse: collapse; border-top: 1px solid black; border-bottom: 1px solid black;"> <thead> <tr> <th style="width: 5%;"></th> <th style="width: 10%; text-align: center;">sg</th> <th style="width: 10%; text-align: center;">non-sg</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">✓</td> <td style="text-align: center;">✗</td> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">✓</td> <td style="text-align: center;">✗</td> </tr> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">✓</td> <td style="text-align: center;">✗</td> </tr> </tbody> </table>		sg	non-sg	1	✓	✗	2	✓	✗	3	✓	✗	<p>(152) <u>No 1, all #</u></p> <table style="width: 100%; border-collapse: collapse; border-top: 1px solid black; border-bottom: 1px solid black;"> <thead> <tr> <th style="width: 5%;"></th> <th style="width: 10%; text-align: center;">sg</th> <th style="width: 10%; text-align: center;">non-sg</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">✗</td> <td style="text-align: center;">✗</td> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">✓</td> <td style="text-align: center;">✓</td> </tr> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">✓</td> <td style="text-align: center;">✓</td> </tr> </tbody> </table>		sg	non-sg	1	✗	✗	2	✓	✓	3	✓	✓	<p>(153) <u>No 2, all #</u></p> <table style="width: 100%; border-collapse: collapse; border-top: 1px solid black; border-bottom: 1px solid black;"> <thead> <tr> <th style="width: 5%;"></th> <th style="width: 10%; text-align: center;">sg</th> <th style="width: 10%; text-align: center;">non-sg</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">✓</td> <td style="text-align: center;">✓</td> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">✗</td> <td style="text-align: center;">✗</td> </tr> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">✓</td> <td style="text-align: center;">✓</td> </tr> </tbody> </table>		sg	non-sg	1	✓	✓	2	✗	✗	3	✓	✓
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Some tentative crosslinguistic generalisations emerging from the data are detailed below.

With respect to person, there is a split between languages that only allow participant-denoting APCs and those without such restrictions. I am not aware of languages with a similar difference between the availability of first and second person APCs. Generally, participant-denoting APCs seem to be crosslinguistically unmarked compared to non-participant-denoting (third person) APCs, which leads to the tentative implicational universal in (156).⁶⁶

(156) *Generalisation on person in APCs:*

If a language has third person APCs, it has first and second person APCs.

This markedness of third person APCs may be partly explained by the assumption that third person pronouns are in complementary distribution with definite articles as predicted by the pronominal determiner analysis, see chapter 5.

Number shows a similar markedness asymmetry to person. While some languages allow APCs of all numbers and others only non-singular APCs, I am not aware of any language that allows only singular APCs. Consequently, non-singular APCs seem to be crosslinguistically less marked as expressed in (157). Indeed, even in languages without number restriction like German singular APCs may have stricter contextual felicity conditions than non-singular ones, see Rauh (2004) and chapter 5 section 5.3.

(157) *Generalisation on number in APCs:*

If a language has singular APCs, it also has non-singular APCs.

⁶⁵Although first person plural APCs are the most common, and sometimes only example of APCs in the literature, I have not encountered conclusive indications for any language where this would be the only permissible pattern. Cf. footnote 55 for the only such claim I know of, which is disconfirmed by other data there.

⁶⁶The pattern in (150) poses a problem for this generalisation, but it concerns only 4 languages, three of which are closely related, see section 2.6.1 above and specifically fn. 50 regarding Sawila.

2.7 Summary

This chapter has provided an overview of the range of expressions of non-possessive nominal person across a sample of 92 languages. Almost all surveyed languages show some form of nominal person and apart from four languages with insufficient data there is only one language in the sample that demonstrably lacks an overt expression of nominal person, Hixkaryana.

By far the most common expression of nominal person are prenominal APCs for which the tentative generalisations in (158) have been observed. Languages with postnominal APCs, on the other hand, display the properties in (159).

(158) *Languages with prenominal APCs*

- a. No strong preference for either pre- or postpositions.
- b. No strong preference in clausal word order (largely correlates with distribution of pre- and postpositions).
- c. Tendency for prenominal demonstratives.

(159) *Languages with postnominal APCs*

- a. Languages with postnominal APCs have postpositions.
- b. Clausal word order is verb-final or “non-configurational” (Hale 1983).
- c. Strong tendency for postnominal demonstratives.

For the relative position of demonstratives, the corollary in (160) emerges.

(160) *Corollary of (158c) and (159c)*

Languages with prenominal demonstratives strongly tend to have prenominal APCs.

Ambidirectional APCs are found in five languages in the sample, although the status of the prenominal APCs is not entirely clear in Kalaallisut and Kobon. All of these languages but Kobon also allow demonstratives to appear pre- and postnominally.

For the seven languages with clitic person marking, the generalisations in (161) have been observed.

(161) *Languages with clitic person marking*

- a. Strong tendency for final clitics.
- b. Strong tendency for head-finality.
- c. Strong preference for prenominal demonstratives.

A survey of non-possessive nominal person marking

There is no clear asymmetry concerning whether or not languages with articles also allow or require them in APCs. About half of them do, which clearly indicates that the pronominal determiner analysis is not universally applicable (see chapters 4 and 6). Similarly, the personal pronoun-demonstrative constructions from section 2.5 suggest that the commonly assumed complementary distribution of personal pronouns and demonstratives is not universal. Possible implications are discussed in chapter 7.

Finally, I have investigated variation in the person and number features that can be expressed by nominal person and proposed the following implicational universals regarding the markedness of third person and singular in APCs.

(162) *Generalisation on person in APCs:*

If a language has third person APCs, it has first and second person APCs.

(163) *Generalisation on number in APCs:*

If a language has singular APCs, it also has non-singular APCs.

Moreover, there seems to be an interaction between the availability of third person APCs and the presence of articles in APCs as formulated in (164).

(164) *Third person-article generalisation:*

If a language has third person APCs and definite articles, it has articles in APCs.

The following part considers to what extent the data from this chapter are compatible with the pronominal determiner analysis and where modifications may be necessary.

Part II

Person features in the nominal domain

This part discusses the theoretical significance of the crosslinguistic data and generalisations presented in the previous chapter. Treating the pronominal determiner analysis sketched in chapter 1 as the null hypothesis, I investigate where it runs into problems and what modifications to the analysis may be necessary. I take this approach for purely analytical purposes here, but note that this may imply that the acquisition of APC-structure also treats the pronominal determiner analysis as a default (Jonathan Bobaljik p.c.). I do not commit to this view here, but see chapter 8 for brief discussion.

Chapter 3 discusses how the observed word order patterns of APCs interact with the position of demonstratives and adpositions relative to the head noun using the Final-over-Final Constraint (FOFC; Biberauer et al. 2014a) as a structural diagnostic. Chapter 4 deals with languages where the complementary distribution of adnominal pronouns and definiteness marking predicted by the pronominal determiner analysis does not hold. Chapter 5 addresses the person and number restrictions encountered in the data.

Chapter 3

Word order

In this chapter, I discuss the word order patterns observed in my survey of APCs, focusing on the relative order of the adnominal pronoun and demonstratives with respect to the accompanying noun, the distribution of articles where applicable as well as the directionality of adpositions used in a language. I adopt the Final Over Final Constraint (Biberauer et al. 2008, 2014a, Sheehan 2013) as a tool to diagnose structure. It rules out head-initial structures embedded in a head-final structure within the same type of extended projection. A technical definition is provided in (165).

(165) $*[\beta_P \dots [\alpha_P \dots \alpha \gamma_P] \beta \dots]$

where

- a. α_P is immediately dominated by a projection of β , and
- b. α and β have the same value for $[\pm V]$. Biberauer et al. 2014a: 199, (51)

A working assumption I make in applying this constraint to the analysis of APC data is that adpositions form part of the extended projection of nouns, following e.g. Grimshaw (2005) and Biberauer et al. (2014a: 199), although this may not hold for all types of adpositions. Although I do not have examples of APCs with adpositions for most languages, a reasonable null hypothesis seems to be that adpositions normally c-command any APC they associate with.¹ As mentioned in chapter 2, the survey does not cover numerals or adjectives in APCs due to the limited availability of relevant data.

On the above assumptions, adnominal pronouns and adpositions are expected to be subject to the normal ordering effects applying inside an extended projection and the predictions for

¹This assumption is based on their respective semantics. Adpositions typically indicate the (concrete or abstract) relation of the referent of an x_{NP} to external elements, suggesting that they scope over elements involved in the establishment/identification of that reference, among them adnominal pronouns. The validity of this assumption is an empirical matter, but it appears to be a reasonable working hypothesis.

Word order

word order on the pronominal determiner hypothesis, with D corresponding to the adnominal pronoun, are sketched in (166). In the harmonic word orders in (166ab), FOFC is trivially satisfied. These are unspectacular and expected. For a non-harmonic structure to satisfy FOFC, any postnominal head material has to be structurally lower than pronominal material as in (166c). Interestingly, this pattern (prepositions and postnominal pronouns) is not attested at all in my sample, as all languages with postnominal APCs have postpositions. Configuration (166d) is incompatible with FOFC, so languages with pronominal APCs and postpositions that instantiate this pattern are of particular interest as potential cases where pronominal determiner analysis cannot apply. I discuss the relevant data in subsection 3.1.

(166) Adpositions and adnominal pronouns

- a. $[_{PP} P [_{DP} D [_{nP} \dots]]]$ *preposition – pronoun – noun*
- b. $[_{PP} [_{DP} [_{nP} \dots] D] P]$ *noun – pronoun – postposition*
- c. $[_{PP} P [_{DP} [_{nP} \dots] D]]$ *preposition – noun – pronoun*
- d. $*[_{PP} [_{DP} D [_{nP} \dots]] P]$ *pronoun – noun – postposition*

Another data point of relevance for the investigation of APC structure is the positioning of demonstratives. The complementary distribution of pronouns and demonstratives in most languages suggests that they form a distributional class (Blake 2001) unless there is strong counterevidence (cf. chapter 2 section 2.5 and chapter 7). This leads to the expectation that adnominal pronouns and demonstratives should be found in the same positions relative to their head noun. Again, languages where this expectation is not met are of particular interest. The ordering effects observed in languages where demonstratives and personal pronouns can co-occur are discussed in chapter 7 section 7.1.

Languages with prepositions, pronominal APCs and pronominal demonstratives pose no problems for the null hypothesis that the pronominal determiner analysis is correct. The remainder of this chapter discusses the more problematic configurations. Section 3.1 deals with languages with pronominal APCs and postpositions, while section 3.2 addresses languages with pronominal APCs and postnominal demonstratives. In section 3.3, I discuss languages with postnominal APCs and then turn to languages with clitic nominal person marking in section 3.4. Finally, section 3.5 briefly discusses possible approaches to languages with ambidirectional APCs.

3.1 Prenominal APCs and postpositions

On the assumption that both the adnominal pronoun and the adposition realise heads in the xnP , in particular the pronominal determiner analysis, languages with prenominal APCs and postpositions (see Table 2.3) would display the non-harmonic nominal structure in (167).

(167) * [PP [DP D [nP ...]] P]

While non-harmonic word orders are not uncommon among the languages of the world,² assuming such a structure exclusively for APCs in languages that have otherwise harmonically head-initial or head-final projections seems suspicious. This line of argument prompts Artiagoitia (2012) to reject the pronominal determiner analysis for prenominal pronouns in head-final Basque, see chapter 2 section 2.3.4.1.³ This is similar to the earlier objection that the structure in (167) involves a head-final projection, PP, taking a head-initial DP as its complement and therefore represents a FOFC violation. This reasoning extends to the other languages of this type, which are also verb-final (with the exception of Hungarian, Finnish and Bilua), suggesting that they do not have pronominal determiners either.

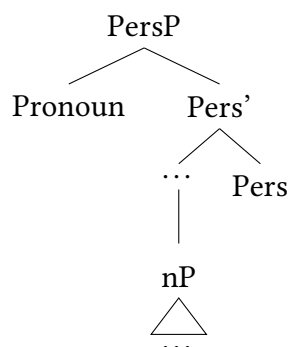
Against this background, the existence of prenominal APCs in languages like Japanese could be interpreted in three ways. Either these languages represent counterexamples to the claim of the universality of FOFC. Alternatively, and in accordance with the tentative conclusion from the headedness considerations above, they do not in fact have the structure in (167), either because they do not have pronominal determiners or because adpositions form distinct projections in the language. While I cannot exclude the possibility that some languages with the problematic pattern might indeed provide counterexamples to FOFC, for present purposes I explore the alternative option that they do not have pronominal determiners of the sort found in English.

I propose the following working hypothesis. Adnominal pronouns in languages with prenominal APCs and postpositions do not realise a head in the main projection line of the xnP . This suggests that adnominal pronouns are specifiers or adjuncts in these languages. Both options are sketched in (168). The relevant specifier position may be in a person-related projection (168a) and agree with its head, thereby providing the xnP with person features, which may be particularly relevant for languages with person-related agreement phenomena. For languages where this is no concern (e.g. Japanese, Korean; see also chapter 4), an adjunction analysis may be equally or more appropriate. The sketch in (168b) assumes adjunction to the nP, although other adjunction sites may be possible.

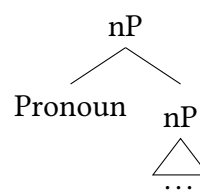
²See e.g. Cinque (2013) and more generally Biberauer & Sheehan (2013).

³See also section 3.4.2 for further discussion of Basque.

(168) a.



b.



The majority of languages with prenominal APCs and postpositions (Table 2.3) also lack articles. This raises additional issues for the pronominal determiner analysis discussed separately in chapter 4 section 4.2, which are avoided if these languages do not have pronominal determiners.

Hypothesising that person features are not encoded in a head position like D makes predictions regarding the interaction of adnominal pronouns, demonstratives and definite articles. First, assuming that definite articles are exponents of D, they do not have to be in complementary distribution with adnominal pronouns in a distinct phrasal position. Further, following Blake's (2001) hypothesis that personal pronouns and demonstratives form a class in languages where they are in complementary distribution, the same should hold for demonstratives. That is, definite articles could in principle co-occur with adnominal pronouns and demonstratives in these languages.⁴ Importantly, however, these considerations do not imply the stronger thesis that languages of this sort *require* the presence of an overt article in APCs or with demonstratives, as there may be further factors governing their distribution.

The four languages of this type with overt definiteness marking are listed in (169).⁵ I set aside Kambaata (169b) until the end of this section because the status of its adpositions is unclear.

- (169) a. Abkhaz
 Supyire
 Hungarian
- b. Kambaata

⁴The Personal Pronoun-Demonstrative Constructions from chapter 2 are addressed separately in chapter 7.

⁵Finnish might be added to this list if Asbury (2008: ch. 3) is correct in analysing the Finnish partitive and genitive case endings as instances of D.

3.1 Prenominal APCs and postpositions

The three languages in (169a) all require the presence of definiteness marking with adnominal demonstratives in line with the prediction above, see the Abkhaz and Supyire examples in (170).⁶

- (170) a. wəy à-jγab [Abkhaz]
that-one (ART)-girl
‘that girl’ after Hewitt 1989: 57
- b. ɪ̀gé ba-ɲí [Supyire]
DEM.G1.SG river-DEF(G1.SG)
‘this/that river’ after Carlson 1994: 190, (1a)

Hungarian has two alternative demonstrative constructions. When a demonstrative modifier appears with its own number and case marking (171), it is obligatorily followed by the definite article. In the alternative – and apparently more marked (Dékány 2011: 72) – construction, the demonstrative lacks inflection (172). In this case, the definite article is ruled out (172a) unless there is a possessor phrase preceding the demonstrative, in which case the definite article shows up at the beginning of the *xnP* (172b). I will not discuss the nature of this alternation here, but see Dékány (2011: ch. 4.2) for an implementation in terms of Svenonius’s (2012) spanning.

- (171) ez-t/ az-t a kalap-ot [Hungarian]
this-ACC that-ACC the hat-ACC
‘this/that hat’ Kenesei et al. 1998: 95, (264a)
- (172) a. (*az) azon/ama kalap-(ok-(at))
the that hat-PL-ACC
‘that hat’ Kenesei et al. 1998: 95, (263b); translation added
- b. az én ezen kalap-ja-i-m
the my this hat-POSS-PL-1SG
‘these hats of mine’ Dékány 2011: 72, (23) referring to Szabolcsi 1994: (24)

These data have been taken to suggest that Hungarian inflecting demonstratives in (171) are phrases in SpecDP, while the non-inflecting ones realise a head lower in the *xnP* (cf. Dékány 2011: ch. 4 and references provided therein) as sketched in (173).

⁶The definiteness marker in Supyire is a concord suffix also found on independent adjectives (Carlson 1994: 75). It is not clear whether one of these concord suffixes directly realises D, or whether they are all reflexes of concord with a silent head encoding definiteness. See also chapter 6 section 6.4.1.

Word order

(173) [DP infl.Dem [D' def.art [DemP [Dem' non-infl.Dem]]]] Dékány 2011: 75, (50)

The head-initiality of DemP and DP raises new issues concerning the application of FOFC. If adpositions form part of the *xnP*, their head-final position should be incompatible with a head-initial DP complement. Since this seems to be attested after all, defying the predictions of FOFC, I assume for present purposes that Hungarian postpositions do not form part of the *xnP* and hence do not give rise to a FOFC violation.

Of the three languages, only Abkhaz uses the definiteness marker in APCs, see (174) repeated from chapter 2 section 2.4, supporting the conclusion that this language does not have pronominal determiners.

(174) ħa(rà) (š^oa(rà), darà) a-bàħč-aa-ja-y^o-c^oa [Abkhaz]
we you they ART-garden-PREV-tend-A-PL
'we (you, they) gardeners' after Hewitt 1989: 159

Does this mean that the structural analysis developed in chapter 4 section 4.1 applies here, which suggests that languages with definite marking in APCs encode person on a head distinct from D? Considering that the language has postpositions, such an approach would face the problems raised above for the pronominal determiner analysis. Assuming FOFC holds, a head-final PP should not be able to take a head-initial complement. If the pronominal adnominal pronouns in (174) headed the APC as suggested for several languages in chapter 4 section 4.1, we would yield just such a problematic head-initial structure. This suggests that Abkhaz adnominal pronouns, and similarly demonstrative modifiers, are better analysed as specifiers or adjuncts rather than heads, in line with my general proposal for languages with pronominal APCs and postpositions.⁷

For Supyire, the only available APC data are numeral expressions involving the noun *shiin* 'person' (175). In this context, that noun cannot take a definite concord marker, while the numeral optionally can, see (175b).

(175) a. wùu shiin taanré [Supyire]
we person.G1PL three
'we three'
b. yìi shiin kánkú-ŋi
you.PL person.G1PL five-DEF(G1SG)
'you five' Carlson 1994: 208, (45)

⁷Note that the pronominal position of the definite article raises the same concerns in Abkhaz. This could either indicate that the definite article is not a head in the *xnP* either, or that the FOFC reasoning does not apply here – possibly because postpositions are not part of the *xnP*. In the latter case, the analysis from section 4.1 with a separate person head would become a viable option again.

3.1 Prenominal APCs and postpositions

In the absence of further data with different nouns, the significance of this pattern of definiteness marking is not clear. While it might indicate an asymmetry between the definiteness marking on the noun and other elements, suggesting an answer to the question in footnote 6, it could also be specific to the light noun nature of *shiin* in this construction.⁸ Independently of this issue, however, the hypothesis that Supyire does not have pronominal determiners seems viable independently insofar as the suffixal nature of the definiteness markers clearly contrasts with the independent, prenominal position of adnominal pronouns.

Hungarian APCs are more problematic, since the distribution of its adnominal pronouns is distinct from that of the inflecting demonstratives. While the latter require the presence of the overt article as discussed above, the article has to be absent in APCs as shown in (176).

- (176) Ti orvos-ok sok-at dolgoz-tok. [Hungarian]
you.PL doctor-PL much-ACC work-INDEF.OBJ.2PL
'You doctors work a lot.' Kenesei et al. 1998: 270, (492)

This raises the possibility that Hungarian adnominal pronouns correspond to the non-inflecting demonstratives, which appear without the definite article unless accompanied by a dative possessor as shown in (172) above. Alternatively, the data could indicate that Hungarian has pronominal determiners after all. I am not aware of a way to distinguish between these two analyses. The possessive construction employed in (172) to show the co-occurrence of low demonstratives with the definite article is not available in this case, as APCs seem to resist appearing with pronominal possessors.⁹

Since both analyses treat adnominal pronouns as heads rather than phrases, they raise the same problem for FOFC as the plain definite article and non-inflecting demonstratives. The relevant projections would be head-initial and should therefore not be able to appear as complement of a head-final PP if the latter is part of the *xnP*. As noted with respect to demonstratives in (173), I tentatively assume here that Hungarian postpositions do not form part of the *xnP*. This suggests that the pronominal determiner analysis represents a possibility for Hungarian, although I do not consider this question settled.

⁸Incidentally, Abkhaz does not use the definite article either in numeral constructions with the numeral prefixed to the noun as in (i).

- (i) pš-y^oə-jγàb-c^oa [Abkhaz]
4-HUM-girl-PL
'(the) four girls' Hewitt 1989: 159

⁹Cf. also English ?**He gave us his children some money for ice cream*. It is not clear whether this is a crosslinguistically stable pattern, but if so it may reflect a clash of the person features of the *xnP* itself and those of the pronominal possessor. This could be a context where *possessive* nominal person (cf. chapter 1 page 4) and what I have termed *non-possessive* nominal person interact after all, possibly to the effect that only one may be overtly expressed.

3.2 Prenominal APCs and postnominal demonstratives

Table 2.4 from chapter 2 lists a small number of languages with prenominal APCs and postnominal demonstratives, repeated in (178).

- (178) Indonesian
Kwaio
Tuvaluan
Wari'
Welsh
Cairene Egyptian Colloquial Arabic
Koromfe

Since they all have prepositions, the pronominal determiner analysis presents an analytical possibility.¹⁰ However, the different distribution of adnominal pronouns and demonstrative modifiers raises the question of whether personal pronouns and demonstratives form a class in these languages (Blake 2001).

The possible co-occurrence of personal pronouns and demonstratives in Tuvaluan and Indonesian (see PPDCs in chapter 2 section 2.5) independently suggests that they represent two distinct categories in these languages. While I have no information regarding the availability of such constructions in Kwaio, it seems a reasonable null hypothesis that it patterns with the majority of the Austronesian languages in my sample in allowing them.¹¹

This issue is independent of the question of whether adnominal pronouns are pronominal determiners, which I return to now. Wari' and Indonesian lack articles, raising the analytical issues discussed for article-less languages in section 4.2 and I refrain from adopting a specific view here. Articles in Tuvaluan and Kwaio, on the other hand, are not in complementary distribution with demonstrative markers and probably not with adnominal pronouns either. For the co-occurrence of articles with demonstrative markers consider (179).¹²

¹⁰Koromfe is reported to have pre- and postpositions, see below for discussion.

¹¹I have PPDC data for four of the seven Austronesian languages in the sample (Indonesian, Maori, Tuvaluan and Vaeakau-Taumako). I have no information about either adnominal pronouns or PPDCs in Rapanui and Madurese.

¹²I adopt Keesing's (1985) gloss *PLU* for the plural article in Kwaio. See below for discussion.

Word order

- (179) a. *te ttogi teenaa* [Tuvaluan]
 the price that
 ‘that price’ Besnier 2000: 147, (787)
- b. *ni ’ola no’o-na* [Kwaio]
 PLU thing DEM
 ‘those things’ Keesing 1985: 86; gloss adapted

Notice that articles in Tuvaluan do not mark a definiteness contrast of the type found in many Indoeuropean languages, “but one involving definiteness, referentiality, and genericness” (Besnier 2000: 367). Similar considerations seem to apply in Kwaio considering that Keesing (1985: 86) translates the article *nga* as ‘a, the’ and that the article “is commonly omitted [sic!] in rapid conversation, particularly when the head noun is subject of sentence or clause” (ibid.). The plural form of the article *ni* is used “[w]hen an individual noun [...] is specifically marked for plurality” (ibid.), meaning that the ‘singular’ article can be used “when [the head noun’s] plurality is not stressed” (ibid.). Independently of these semantic differences from definite articles found in other languages, the above data show that Tuvaluan and Kwaio have distinct positions for articles and demonstratives.

Turning to adnominal pronouns, in Tuvaluan there is good evidence that they are not in complementary distribution with the articles either. While plural examples like (180) may wrongly give the impression that articles do not occur in Tuvaluan APCs, this is due to the fact that the Tuvaluan plural article is phonologically null (Besnier 2000: 365).

- (180) *Taatou tino Tuuvalu e see tau ki meakkai kolaa.* [Tuvaluan]
 we.PL.INCL person Tuvalu N-PST NEG benefit to food those
 ‘We Tuvaluans are not accustomed to that [type of] food.’
 after Besnier 2000: 393, (2019)

In the singular, the presence of the article *te* is clearer. When this article precedes a word starting in /t/, it drops its vowel and geminates the initial /t/ of the following word (Besnier 2000: 365). This is the case for *ttino* ‘the+person’ and *ttagata* ‘the+man’ in (181), showing that both APCs contain an article between the adnominal pronoun and the head noun.

- (181) *Au ttino poto koo leva ne iloa nee au* [Tuvaluan]
 I the+person intelligent PFV know ERG I
mea kolaa faatoaa iloa nee koe ttagata valea.
 thing those just know ERG you the+man stupid
 ‘I, an intelligent person, have long known what you, stupid man, are just discovering.’
 Besnier 2000: 393, (2018)

3.2 Prenominal APCs and postnominal demonstratives

The matter is less clear for Kwaio. The few APC examples provided by Keesing (1985) do not contain the articles *nga* or *ni*, but a “particle *-a*” (Keesing 1985: 104) marks adnominal occurrences of full focal pronouns (182a) and clitic object pronouns (182b).

- (182) a. 'a-gauru-a ta'a i 'Ai'eda [Kwaio]
FOC-3PL-a? people LOC 'Ai'eda
'those 'Ai'eda people'
- b. kwae-'adauru-a ta'a
pay-1PL.INCL-a? people
'pay us people' modified after Keesing 1985: 104

Keesing provides no analysis for this affix, but its position between the adnominal pronoun and the head noun corresponds to that of the articles in other Polynesian languages like Maori or Tuvaluan (see above and chapter 2 section 2.4.2). An analysis of Kwaio *-a* as a reduced form or an allomorph of the article *nga* in APC contexts would bring Kwaio APCs in line with those of Maori and Tuvaluan.¹³ Given the scarce data available for Kwaio, I tentatively assume this analysis.

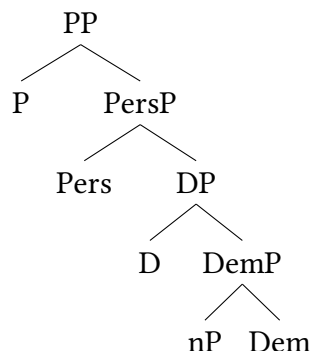
In (183), I sketch two potential analyses for Tuvaluan and Kwaio *xnPs* in light of this discussion. I apply the hypothesis further developed in chapter 4 section 4.1 that co-occurrence of a definite article and an adnominal pronoun indicates the presence of two distinct heads.¹⁴ The tree in (183a) illustrates which structural properties should hold if demonstratives are taken to form part of the *xnP* in these languages, i.e. to project a DemP as part of the nominal projection line. In order to conform with the FOFC restrictions, a head-final DemP would have to be relatively low in the *xnP*. Alternatively, demonstratives could be *nP*-adjuncts as sketched in (183b).

¹³Remember that the article *nga* is used “[w]hen the head noun is individual, and when its plurality is not stressed” (Keesing 1985: 86), i.e. it is number-neutral. Since the personal pronoun also expresses number, the use of the marked plural article *ni* may be suppressed (or at least marked) in APCs.

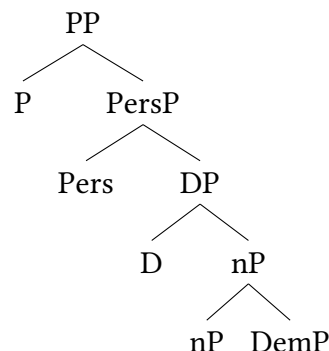
¹⁴I disregard NumP here. Insofar as number seems to be encoded on articles and demonstratives, these languages may in fact encode number as a property or modifier of D (Wiltschko 2008).

Word order

(183) a.

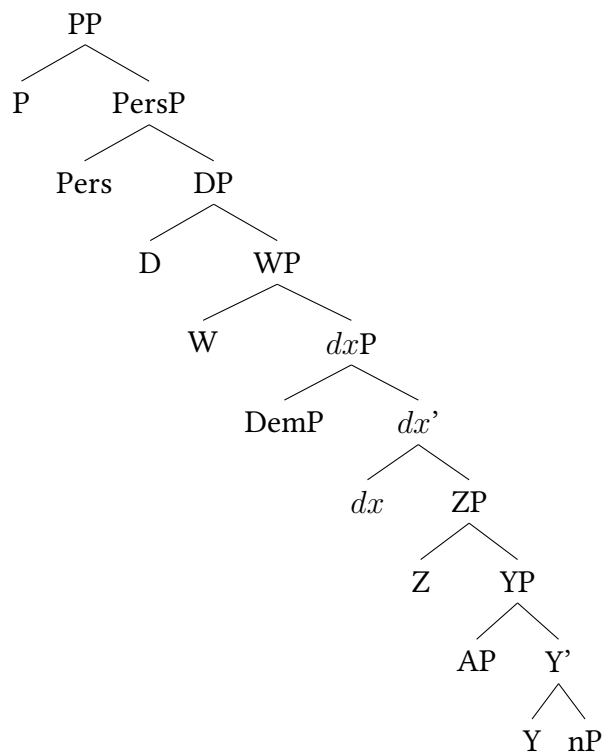


b.



Even on an alternative approach where demonstratives as well as numerals and adjectives would be analysed as specifiers after Cinque (2005), adnominal pronouns as well as definite articles should be located structurally higher than the demonstratives – independently of whether they themselves are heads or specifiers. In the structure sketched in (184), the demonstrative is generated in the specifier of Choi’s (2014b) deictic *dx* head and adjectives are generated in Spec,YP. To derive the order of noun-adjective-demonstrative observed in these languages, nP would have to move across AP to Spec,ZP to derive the postnominal position of adjectives in the Oceanic languages, followed by movement of ZP to Spec,WP. The prenominal position of the articles and adnominal pronouns suggests that they are merged higher than the complex WP.

(184)



3.2 Prenominal APCs and postnominal demonstratives

While I do not have language-internal arguments from Tuvaluan or Kwaio for a relatively low position of the demonstrative on the adjunction analysis in (183b), the fellow Polynesian language Maori provides suggestive evidence that even on that analysis demonstratives need to be adjoined below D. As these languages are related, it is feasible that their structures may be similar.¹⁵

Maori has prenominal and postnominal demonstrative modifiers. The latter involve a prenominal article like in Tuvaluan and Kwaio, see (185a), while prenominal demonstratives are “attached to the article *te*” (Bauer 1993: 112), see (185b) for the demonstrative *nei* ‘this (close to speaker)’.

- (185) a. *te pukapuka raa* [Maori]
the book DIST
‘that book’ Bauer 1993: 112, (468)
- b. *teenei pukapuka*
this book
‘this book’ Bauer 1993: 112, (466)

On the adjunction analysis, the demonstrative would have to adjoin lower than DP in (185b) so as to appear to its right. The simplest way to capture (185a) would be to spell out the adjoined demonstrative on the other side of the same adjunction site below DP.¹⁶

If demonstratives are analysed as heads as in (183a), the prenominal configuration in (185b) may be derived from the postnominal one in (185a) by head-movement of Dem to the higher D head. Deriving the postnominal order from the prenominal one via head-movement of the demonstrative would be problematic, as Biberauer et al.’s (2014a) Final-Over-Final-Constraint prevents the required configuration with a head-final DemP complemented by a head-initial DP.

On the analysis in (184) modelled after Cinque (2005: 324, (6x)), the final movement of ZP across the demonstrative would not take place in structures like (185b), leaving the article and the demonstrative string-adjacent (though structurally separated by a null W head).

¹⁵The difference between the Maori word order noun-adjective-numeral-demonstrative (Cinque 2005: 320, fn. 19; 324, (6x)) and the Tuvaluan one concerns the potentially prenominal position of numerals in the latter (Besnier 2000: 150). The crucial difference in the derivation of such a numeral-noun-adjective-demonstrative order on Cinque’s specifier-based analysis is that the noun-adjective constituent does not move across the numeral before the complex constituent containing noun, adjective and numeral moves across the demonstrative (Cinque 2005: 323, (6s)). Since numerals play no role in the present discussion, that difference is insignificant here.

¹⁶This analysis would not require deriving one configuration from the other one, but simply changing the directionality of the adjunct. For an alternative analysis of this alternation involving incorporation of the head of a low adjunct DemP into the D head in a structure like (183b) see Dooley Collberg (1997).

Word order

What is common to all these analyses is that demonstratives and personal pronouns occupy distinct structural positions, contrary to Blake's (2001) generalisation, suggesting that person features are not only independent from D, but also from demonstrativity in these languages, see also chapter 7 section 7.1.2.

This leaves us with Cairene Egyptian Colloquial Arabic, Welsh and Koromfe. For the Arabic variety, demonstratives and personal pronouns appear to be in complementary distribution, i.e. there are no PPDCs. Moreover, other Arabic varieties, e.g. Gulf Arabic (chapter 2), have pronominal demonstratives. So it seems feasible that demonstratives and personal pronouns form a class – in line with Blake (2001) – and the pronominal position of adnominal pronouns is related by movement to the low default position of postnominal demonstratives. While this seems to suggest that adnominal pronouns are phrasal and not pronominal determiners in this language, see chapter 6 section 6.4.1 for discussion of the possibility that Arabic has pronominal determiners after all.

An argument that Welsh adnominal pronouns are indeed phrasal and not pronominal determiners comes from the observation that they can trigger soft mutation (186b) while the definite article does not (186a).¹⁷ Soft mutation has been claimed to be triggered by a preceding c-commanding phrase (Borsley 1999, Borsley & Tallerman 1998, Harlow 1989, Tallerman 2009). If this is true, Welsh adnominal pronouns are a phrasal category and cannot be pronominal determiners.

- (186) a. y myfyrwyr [Welsh]
DEF student.PL
'the students'
- b. ni fyfyrwyr
we SM.student.PL
'we students'¹⁸

There are no PPDCs in Welsh (David Willis, p.c.). While this seems compatible with the view that demonstratives and pronouns are generated in the same (low) position in the *xnP* (Choi 2014b) which ends up postnominally due to (phrasal or head) movement of the noun, such an account requires pronouns to undergo obligatorily fronting, while demonstratives never do (in contrast to Arabic, where they may front in some varieties). Taking category membership to be dependent on common distribution this complete dissociation calls into question whether personal pronouns and demonstratives are co-categorial in Welsh in the first place, even leaving aside the problems Willis (2006) discusses for N- or NP-raising accounts of

¹⁷Thanks to David Willis for the data.

3.2 Prenominal APCs and postnominal demonstratives

xnP-internal word order in Welsh.¹⁹ So while both adnominal pronouns and demonstratives may be phrasal categories in Welsh, I assume that they do not form a distributional class.

Turning to Koromfe, it has been described as having both prepositions and postpositions, although “postpositions are more difficult to pin down because often normal common nouns are used postpositionally” (Rennison 1997: 77). This asymmetry is further supported by the observation that “apart from the hard core of two ‘postpositions proper’ with no meaning as an independent noun, most of the postpositions seem to have originated in common nouns” (Rennison 1997: 294). While this could be taken to suggest that the prepositions are the “real” adpositions in the language and that it is therefore essentially head-initial in the nominal domain, the determiner system of the language complicates matters.

Koromfe marks definiteness by means of xnP-final determiners, which have a short and a long form (Rennison 1997: 81, 234, 260f.). Rennison (1997: 81) compares the short forms to English definite articles (187a), while “the long form is more akin to the English demonstratives *this* and *that*” (ibid.) as illustrated in (187b). There is another category of deictics with a stronger deictic force than the demonstrative determiners (Rennison 1997: 83, 234f.), which is illustrated in (187c).

- (187) a. a bɔrɔ hoŋ
 ART man.SG DET.HUM.SG
 ‘the man’
- b. a bɔrɔ hoŋo
 ART man.SG LONG.DET.HUM.SG
 ‘this/that man’
- c. bɔrɔ nandɪ
 man.SG DEICT.HUM.SG
 ‘that man (that we’ve just been talking about)’

Rennison 1997: 81f.; glosses added

Koromfe also has an article *a* with unclear function. It is not related to definiteness and appears “obligatorily before all common nouns” (Rennison 1997: 80f.) except in a few config-

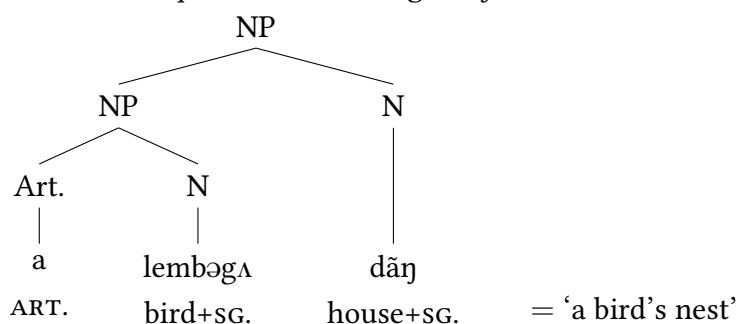
¹⁹McCloskey (2004) observes collocations of personal pronouns and demonstratives in Irish, another Celtic language, see (i). This supports the hypothesis that personal pronouns and demonstratives are not members of the same category in at least some Celtic languages, but simultaneously raises the question of what excludes similar constructions in Welsh.

(i) Chuaigh sé seo ar seachrán [Irish]
 go PST he DEM
 ‘This person went astray.’ McCloskey 2004: 2, (7a)

Word order

urations. As shown in (187ab), the article occurs obligatorily with the determiners, but it is ruled out with the deictics (187c). Moreover, the article is in complementary distribution with the second prenominal modifier Rennison describes, namely possessive pronouns (Rennison 1997: 79f.), and also with genitive noun phrases. In the latter case, the full phrase contains an initial *a*, but Rennison (1997: 348f.) argues that it is part of the genitival noun phrase, see (188). Based on the shared distribution of these elements, I propose that the article *a*, possessive pronouns and genitive phrases occupy the same position in Spec,DP (see below).

(188) *An NP+N complex NP with a singular first noun* Rennison 1997: 349, (760)



As discussed in chapter 2 section 2.4.2.2, the article can appear in APCs, although it can be dropped for presumably phonological reasons (Rennison 1997: 250), see (189).

(189) *ɔkɔ* (a) *korombΛ*
 DISJP.1PL ART *proper name*
 'we Koromba' after Rennison 1997: 251, (585)

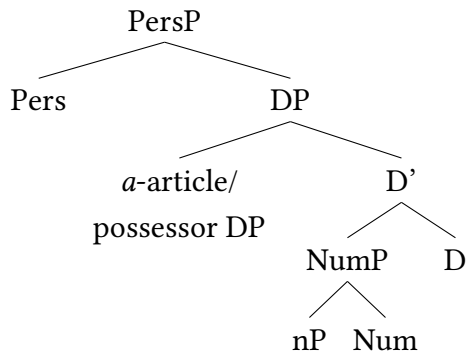
Since possessive pronouns are in complementary distribution with the article and elision of the article licenses an interpretation of the string in (189) as 'our Koromba' rather than 'we Koromba', at least some speakers avoid eliding the article in this configuration (John Rennison, p.c.). If the apparent optionality of the article is indeed an effect of conflicting phonological and interpretive requirements, it seems reasonable to assume that it is structurally present in (189) in either case.

Turning to the analysis of the *xnP* in Koromfe, the postnominal determiners marking definiteness (Rennison 1997: 234) are plausible candidates for realising the category D. This suggests that the Koromfe DP is head-final. As mentioned above, the prenominal article shares its distribution with possessive pronouns and genitive phrases. This distribution indicates that we are dealing with a phrasal position, so I hypothesise that in Koromfe D normally carries a feature corresponding to EPP in the clausal domain that requires merging of a specifier. This feature can be satisfied by a possessor/genitive DPs – either a pronoun or

a full phrase – or the article *a*, which may represent a default morpheme for the satisfaction of the EPP requirement similar to expletive pronouns in the clausal domain.²⁰

If adnominal pronouns and determiners have different positions, the pronominal determiner analysis cannot apply in Koromfe. Moreover, it seems possible for APCs to occur with a phrase-final determiner (John Rennison, p.c.), which further supports this view. I therefore propose that adnominal pronouns project a head-initial PersP taking a head-final DP complement, a configuration compatible with FOFC, see (190). Notice that this structure partly resembles that proposed for the Austronesian languages in (183a). This similarity is picked up again in the discussion of PPDCs in chapter 7.

(190)



To conclude this discussion of Koromfe, I briefly return to the issue of the existence of pre- and postpositions in the language. Building on Rennison’s (1997, 294) observation that “most of the postpositions seem to have originated in common nouns”, the structure in (190) provides a way to deal with the apparent availability of pre- and postpositions under the assumption that Koromfe postpositions correspond to what would be the possessee nP in (190). As discussed around example (188) above, possessee lack the article *a* (Rennison 1997: 345f.). This also holds for postpositions. If they are analysed as (potentially grammaticalised) instances of possessee nPs as in (190), the “complement” of the postpositional noun corresponds to the possessor DP in the specifier of the main DP. On this analysis, Koromfe “postpositions” are no real adpositions and cause no FOFC violation in combination with the pronominal Pers head.

3.3 Postnominal APCs

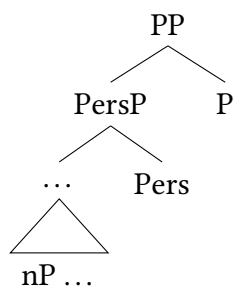
The languages with postnominal APCs (chapter 2 section 2.3.2) have fairly homogenous word order properties. They are all verb-final, have postpositions and, except for Yagaría and Fore, they have postnominal demonstratives, too. This clear head-finality harmonises well with

²⁰See Vergnaud & Zubizarreta (1992) on expletive articles in French.

Word order

the hypothesis that person is encoded by a head in the *xnP* in these languages as sketched in (191) using *Pers* as the person head for concreteness – the actual identity of the head may vary. The pronominal determiner analysis is compatible in principle.

(191)



I begin with the discussion of the languages with articles in (192), leaving aside Adang, for which I only have data of APCs with proper names (see chapter 2 section 2.6.1.1).

- (192) Adang
 Lavukaleve
 Usan
 Wersing
 Kamang
 Western Pantar

In my discussion of Lavukaleve in chapter 5 section 5.2.1, I suggest that the language does indeed have head-final pronominal determiners (see there fore details).

In the single example of an APC from Usan provided by Reesink (1987: 53f.), the definite determiner *eng* does not occur, see (193). It is unclear whether this means that APCs are in complementary distribution with the determiner, whether the determiner is optional, or whether it is simply not available with proper names.

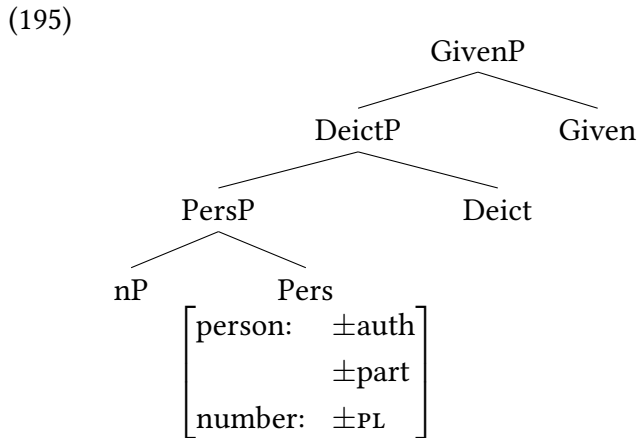
- (193) wuri âr ig-urei. Ne **Sau uter wo** bo der qâm-ar:... [Usan]
 they idle be-3PL.FPAST and Sau fierce he again get.up say-3SG.FPAST
 ‘They stayed idle. And the fierce Sau he got up in turn and said:...’

Reesink 1987: 53f., (25); emphasis added

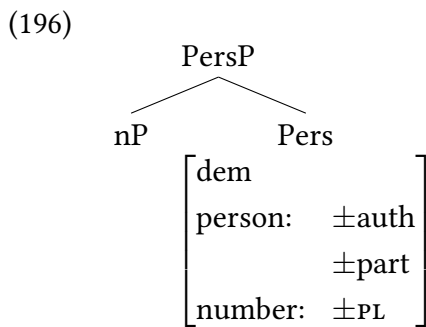
It should be pointed out that the determiner *eng* is itself complex, consisting of the proximal deictic *e*, the only deictic used for textual deixis, and the givenness marker *-ng* (Reesink 1987: 77). Moreover, *eng* can follow personal pronouns in (194), where Reesink (1987: 54) analyses it as a topic marker.

- (194) wo eng ininou wau imâ gâs ende
 he this our boy younger.brother like thus
 ‘As for him, he is like our younger brother’ Reesink 1987: 54, (26)

This could suggest that Usan encodes person below the locus of deictics and givenness marking in at least this case, as tentatively sketched in (195).²¹



However, for lack of data it remains unclear if the simultaneous appearance of the article with a pronoun is possible in a full APC as well. If this is not the case, data like (194) may involve a nominal use of pronouns as discussed in chapter 7 section 7.1.1. Plain APCs would then involve a simpler structure like (196), with person, number and deicticity/demonstrativity encoded on the same head.



The availability of APCs without articles and the occurrence of pronouns with articles but without a full noun resembles the word order alternation observed for Mandarin PPDCs in chapter 2 section 2.5.3 (cf. also the discussion in chapter 7 section 7.1, particularly footnote 3 in that chapter). If Usan allowed such constructions with a full noun, an adnominal pronoun and an article/demonstrative after all, this would suggest that the language actually has an

²¹Nouns (and adjectives) have no number-marking in Usan, which may indicate that there is no dedicated Number projection (Wiltschko 2008). The only nominal expressions displaying a person distinction are pronouns, so for simplicity I assume number to be encoded on the person head realised by pronouns.

Word order

xnP-structure like (195). This in turn would be unique among the structures proposed here insofar as person would be neither in the lowest nor the highest part of the xnP, representing a potential counterexample to the Extremity of Person Hypothesis tentatively considered in chapter 8 section 8.2.

As mentioned in chapter 2 section 2.4.2.2, Wersing, Kamang and Western Pantar do not seem to use their articles obligatorily, suggesting that no functional head like D is involved. Wersing and Kamang have two distinct determiners that mark definiteness and specificity respectively (see Schapper & Hendery 2014 for Wersing, Schapper 2014 for Kamang). In both of them, adnominal pronouns can co-occur with determiners, see (197).

- (197) a. bon ba **genal** pod-a [Wersing]
tree DEF 3.ALONE broken-REAL
'That tree alone was broken.' Schapper & Hendery 2014: 478, (96)
- b. almakang=ak **gera** [Kamang]
people=DEF 3.CONTR
'the {specific group of} people' Schapper 2014: 313, (58a)

In Wersing, the occurrence of an article is not obligatory in APCs as seen in (198). While I do not know whether this optionality also holds in Kamang, the Western Pantar data discussed in section 2.4.2.2 of chapter 2 show that the co-occurrence of articles and adnominal pronouns in that language is also optional.

- (198) aning **gnuk** unan le-wena [Wersing]
person 3.DU louse APPL-search
'Those two people searched for lice.' Schapper & Hendery 2014: 472, (75b)

These observations suggest that the pronominal determiner analysis does not apply in these languages. Two potential alternatives are that person is encoded on a distinct head in the xnP, or that adnominal pronouns are indeed modifiers adjoined to the noun phrase as suggested, e.g., by Schapper (2014: 313) for Kamang. I will not decide between these possibilities here.

The remaining languages with postnominal APCs, listed in (199), have no definite articles. This complicates the question of whether the pronominal determiner analysis applies, see chapter 4 section 4.2.

- (199) Kaera
Sawila
Yagara
Fore

Amele
Warlpiri

I have nothing to say about Kaera and Sawila due to a lack of data. While Yagaria and Fore share the general head-finality of the other languages with postnominal APCs, they are the only ones with prenominal demonstratives. This makes them more similar to the languages with enclitic person(-number) marking treated in section 3.4, which is not too surprising considering that both languages also show enclitic person marking.

Following the FOFC considerations at the beginning of the chapter, the prenominal demonstratives in these languages cannot be heads in the main projection line of the *xnP*. As discussed in section 2.3.4.3 of chapter 2, the languages have personaliser morphemes, involved in agentivity marking. These are in complementary distribution with postnominal pronouns, but can co-occur with the clitic person marker, at least in Yagaria as shown in (200) repeated from (87) in chapter 2.²²

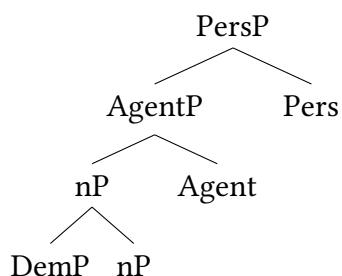
- (200) Avedini agae' bade-ma-da game' de hao-d-u-e
 Avedini his boy-PIV-I fight man shoot-PST-1.SG-IND
 'I, Avedini's son, shot the enemy.' Renck 1975: 19

This raises questions about the location of person in Yagaria (and potentially Fore). While the postnominal pronouns seem to realise the same position as the personaliser, presumably an agentivity related position, the clitic pronouns appear to occupy a distinct, higher position. Since it is unclear which factors determine whether a full postnominal pronoun, a clitic person-number marker or none of them occur, these observations are hard to interpret and further research on these aspects of the Gorokan languages would be required.

A tentative sketch of a possible configuration of the *xnP* in these languages is given in (201) on the hypothesis that the personaliser realises an Agent head, turning the *xnP* into a potential agent (see chapter 2 section 2.3.4.3 for discussion), while the postnominal pronouns and person-number clitics realise Pers. As with other Papuan languages discussed here, number is only marked on pronouns or personalisers, indicating that number features are located on Agent and/or Pers rather than on a distinct Number projection. Note that while I assume here that demonstratives adjoin to *nP*, they may alternatively realise a specifier position.

²²I have not found relevant examples for Fore in Scott (1978).

(201)



For Amele, examples like (202) suggest that postnominal pronouns do not encode definiteness, as the sentences receive indefinite readings independently of the presence of the pronoun.

- (202) a. Dana (uqa) ho-i-a. [Amele]
 man 3SG come-3SG-TOD.PST
 ‘A man came.’
- b. Dana (ale) ho-si-a.
 man 3DU come-3DU-TOD.PST
 ‘Two men came.’ Roberts 1987: 162, (3)-(4)

Roberts (1987: 203) suggests that “[a]n unmarked NP has a definite referent” and that indefinite phrases are “obligatorily marked by either the indefinite article *oso* ‘indefinite’ or the general quantifier *leih* ‘some’” (Roberts 1987: 204). Amending this, John R. Roberts (p.c.) suggests that, like Tok Pisin, Amele actually tracks specificity rather than definiteness, so that the markers *oso* and *leih* indicate non-specificity and null marking is an indicator of specificity. This explains the availability of an indefinite reading in (202), since the absence of the article actually marks specificity and not definiteness. Following Wiltschko’s (2008) reasoning concerning number marking, the paradigmatic significance of null marking indicates that there is a functional head encoding specificity in Amele. Considering that demonstrative pronouns seem to be in complementary distribution with the non-specific markers, too, they presumably occupy the same position, potentially realising a [+specific] head with an additional [demonstrative] feature.

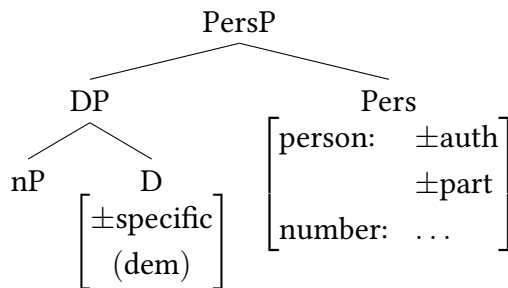
Amele postnominal pronouns can co-occur with demonstratives, see the distal demonstrative and third person plural pronoun in *dana eu age* ‘man that 3PL’ in (203).²³

- (203) Dana eu age oso uqa sab je-i-a.
 man that 3PL INDF 3SG food eat-3SG-TOD.PST
 ‘One of those men ate the food.’ Roberts 1987: 204, (262)

²³See chapter 7 for discussion of personal pronoun-demonstrative constructions (PPDCs).

This example also shows the third person singular pronoun *uqa* co-occurring with the non-specific marker *oso*. While I am not aware of similar examples with non-third person pronouns, these data suggest that adnominal pronouns are encoded independently of specificity in Amele. So even when the head encoding specificity is identified as D, which I assume here for expository purposes, Amele does not have pronominal determiners. Instead its structure could be sketched as (204).²⁴

(204)



Since one of the functions of the postnominal pronouns is “to give focus to the nominal referred to by the pronoun” (Roberts 1987: 210), it seems that this projection interacts with information structure. If focus is indeed the relevant property, two alternative analyses are feasible. Either the Pers projection is actually a Focus projection, which is absent if there is no overt pronoun, or the projection is essentially person (and number) related, with focus representing an additional optional feature. The latter option seems more appropriate, as it allows non-focus related occurrences of postnominal pronouns when they are used “to clarify the person and number of the referents where this is not clear from the nominal itself or [...] to provide verbal agreement for the nominal” (Roberts 1987: 210).²⁵

Turning to Warlpiri, Hale (1973) argues that third person pronouns can act as definite determiners in this language, see (205), and that other (non-third person) postnominal pronouns may occupy the same position.

- (205) a. *ɲarka njanuŋu ka puḷa-mi* [Warlpiri]
 man 3[SG] PRS shout-NPST
 ‘The aforementioned man is shouting’
- b. *ɲarka njanuŋu-tjara ka puḷa-mi*
 man 3-DU PRS shout-NPST
 ‘The two aforementioned men are shouting’ after Hale 1973: 316, (22)

²⁴Nouns and demonstratives are number-neutral in Amele and number is reflected only on pronouns and verbal agreement, so the language may lack a distinct Num head and encode number on the Pers head instead.

²⁵Nouns lacking an accompanying pronoun would have to be analysed as having undergone pro-drop, comparable to the unagreement phenomenon in Spanish, Greek and other languages, see chapter 6.

Word order

Hale (1973: fn. 13) notes that bare nouns are unspecified for definiteness (nor, presumably, specificity), see (206). Following Wiltschko's (2008) reasoning again, this lack of complementary distribution may suggest that Warlpiri has no functional head encoding definiteness.

- (206) *ɲarka ka puḷa-mi*
man PRS shout-NPST
'A/the man is shouting.' after Hale 1973: fn. 13

However, Hale (1973) discusses structures with verbal agreement in the absence of an overt determiner, see (207) and also Lyons (1999: 142-145), which may represent instances of the unagreement phenomenon analysed in chapter 6 for some Indo-European languages. For further discussion of the data below see chapter 7 section 7.2.2.

- (207) *ɲarka ka-npa puḷa-mi*
man PRS-2SG shout-NPST
'You man are shouting' after Hale 1973: 317, (24b)

I agree with Hale (1973) that these configurations suggest that at least person and number are represented on a distinct head in the nominal domain that triggers verbal agreement. Its categorial identity remains open, as does the question of what exactly determines whether such a head is spelled out overtly as in (205) or not, as in (206) and (207).

In conclusion, there seems to be a range of structural configurations among the languages with postnominal APCs regarding the location of person within the *xnP*. While I propose that Lavukaleve has pronominal determiners, Amele seems to encode person in a higher position comparable to the languages discussed in chapter 4 section 4.1. Yagaria and Fore appear to show a similar structural configuration, albeit without a clear D category. If the analysis proposed for Usan is on the right track in spite of the very limited data, it represents an interesting case where person may be located relatively low in the *xnP*.

3.4 Prenominal demonstratives in languages with enclitic nominal person

With the exception of Classical Nahuatl, about which I have nothing to say here and which is therefore not part of the discussion, all languages with clitic person markings presented in section 2.3.4 of chapter 2 and listed in (208) employ enclitics for nominal person marking.

3.4 Prenominal demonstratives in languages with enclitic nominal person

- (208) a. (Classical Nahuatl)
b. Basque
c. Alamblak
 Bilua
 Fore
 Hua
 Yagaria
 Khoekhoe

Apart from Bilua, which displays SVO order possibly due to contact with Oceanic languages (Terrill 2011), all these languages are verb-final. Moreover, all of them have postpositions, which indicates that they are also head-final in the nominal domain on the assumption that adpositions are part of the *xnP* (see above). From this perspective, the fact that they also have *xnP*-final person markers resembles the languages with postnominal APCs discussed in the previous section. This particularly holds for the analysis proposed for Basque in chapter 2 and section 3.4.2 below, where the final proximate plural marker is argued to be a head-final pronominal determiner.

However, the remaining languages with enclitic person marking in (208c) have pronominal demonstratives in contrast to the postnominal demonstratives attested in most languages with postnominal APCs. Indeed, the two languages with postnominal APCs and pronominal APCs, Yagaria and Fore, fit this generalisation insofar as they also have enclitic person markers. Considering these observations, it seems unlikely that the variation between postnominal APCs and enclitic person markers is independent from the properties and syntactic representation of demonstratives in the *xnP* (as specifiers or heads, distinct from person features or in the same position). The underlying reasons for the correlation between enclitic person marking and pronominal demonstratives currently remain unclear, however.

As discussed with respect to Yagaria and Fore in section 3.3, the head-finality of *xnPs* in the enclitic-person languages suggests that pronominal demonstratives do not realise a head in the main projection line of the *xnP*, as FOFC rules out head-initial phrases as complements of a final head in the same extended projection. Given their strict positioning before the nominal, demonstratives in these languages can plausibly be analysed as specifiers. For concreteness, the diagram in (209) identifies the relevant attachment site as Spec,PersP, although different sites may be relevant for different languages.

3.4 Prenominal demonstratives in languages with enclitic nominal person

to the discourse participant denoted by the *xnP* they occur in, as captured in Haacke's (2013) featural analysis of the Khoekhoe articles in (211).²⁷

(211)	<i>ti</i>	<i>si</i>	<i>sa</i>	//î	Haacke 2013: 146, (161)
	+definite	+definite	+definite	+definite	
	+speaker	+speaker	+addressee	+discussed	
	+human	–addressee	+human		
	+singular	+human			
		–singular			

This looks like person is represented twice in the *xnP*, once by the phrase-final PNG-morpheme and once by the article if present, raising the question of how compatibility of both feature sets is ensured. One possibility would be to assume a symmetric agreement mechanism as proposed, e.g., by Ackema & Neeleman (2013) for the unagreement phenomena discussed in chapter 6, involving a unification mechanism that ensures that the two independently generated feature sets do not contain contradictory values (see section 6.2.1).

I want to propose an alternative that maintains an asymmetric account of agreement. This requires that one set of person features per *xnP* is interpreted and acts as a controller in the terminology of Corbett (2006), providing person features to the agreement target. In Chomsky's (2000) probe-goal system of agreement and related approaches, this corresponds to the distinction between interpretable and uninterpretable features, while the DM framework additionally provides the distinction between primary and secondary exponence of features which I employ here (I mainly build on Siddiqi 2010, but see also Harley & Noyer 1999, Noyer 1997). Insertion of a VI primarily expressing a feature on a terminal node discharges that feature, i.e. no other VI can primarily realise that feature. A VI secondarily expressing a feature does not discharge that feature and does not compete for insertion into the syntactic node carrying that feature, but it requires the secondarily expressed feature to be accessible elsewhere in the structure. I assume that for a VI to be able to secondarily express a feature, the feature needs to be in the same spell-out domain (Embick 2010, see chapter 5 section 5.1.1 for a summary) and c-commanded (Bobaljik 2000) by the node the VI primarily expresses.²⁸

Haacke (1977) and Böhm (1985: 134f.) suggest that the morpheme crucial for the denotation of person, number and gender is the PNG-marker, while the article acts as a modifier. Importantly, the articles do not involve a full set of person features, see (211). I propose that the only person-related feature primarily expressed by a Khoekhoe article is a unary [ad-

²⁷Following Haacke (2013: 145), the [+human] feature can be derived from the [+speaker] or [+addressee] features, so it may not be syntactically active.

²⁸In the structure hypothesised in (213), the relevant spell-out domain would include PersP but exclude the lower phase *nP*.

Word order

dressee] feature in inclusive and second person contexts (see chapter 1 section 1.2.1). Apart from this, the articles only secondarily express person, i.e. the presence of certain person features on the PNG-marker may be a condition for the insertion of a specific article. This is illustrated in the vocabulary items in (212).

- (212) a. *ti* ↔ [+def, (+auth), (sg)]
b. *si* ↔ [+def, (+auth)]
c. *sa* ↔ [+def, addressee, (+part)]
d. *//î* ↔ [+def]

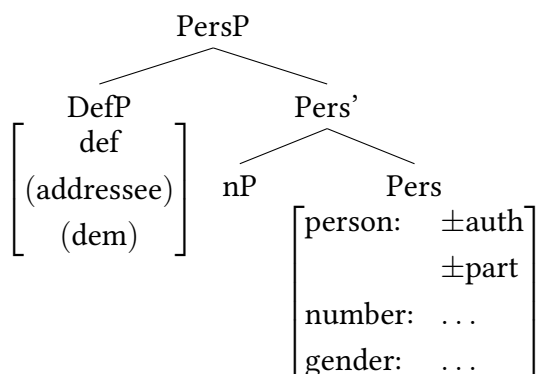
As hinted before, an alternative hypothesis would be to posit uninterpretable person features on the syntactic head realised as an article, which would agree with the interpretable person features on the Pers head. This analysis requires two uninterpretable person features on the category realised as article, of which only one is ever relevant at a time. Recall that the morphemes realising the article are only ever sensitive to maximally one of the person features [\pm auth, \pm part] – *ti* and *si* require [+auth], *sa* [+part], while *//î* seems to be unrestricted.²⁹ So while I cannot rule out the agreement analysis, I adopt the secondary exponence analysis outlined above as it assigns the idiosyncrasy of the variable realisation of the article to the storage of idiosyncratic information, the vocabulary, while not employing superfluous features.

The final aspect addressed here is the structural location of the articles. Lyons (1999: 311) suggests that they are located in SpecDP while the PNG-markers realise the D head. Given the assumption that articles and demonstratives occupy the same position in the language, this proposal is very similar to the structure sketched in (209) above, with the important difference that the head realised by the PNG-morphemes is not D on my proposal. In particular, the presence of the relevant morpheme in the non-definite example (210a) above suggests that the Pers head itself does not encode definiteness. Using the tentative label DefP for the article, the resulting structure is (213). The bracketing around the features [addressee] and [dem] indicates their (structural) optionality and is unrelated to the brackets indicating secondary exponence in (212), which is a morphological (and hence post-syntactic) concept.

²⁹Some forms listed by Haacke (1977: 48f.) suggest that *//î* can actually co-occur with first and second person PNG-markers. Unfortunately, there is no indication as to what difference in meaning is indicated by the use of *//î* over the other articles.

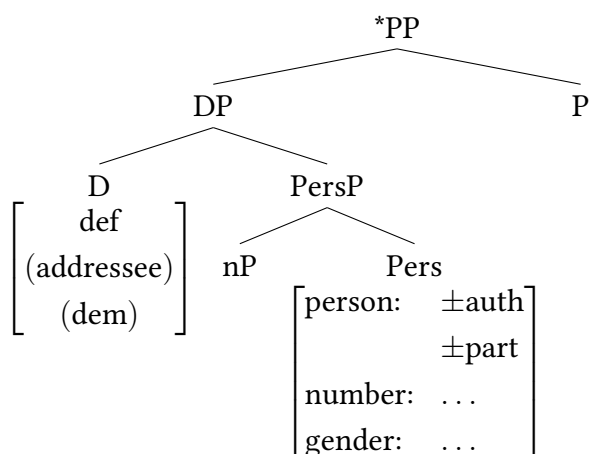
3.4 Prenominal demonstratives in languages with enclitic nominal person

(213)



The encoding of definiteness on a distinct phrase in specifier position may seem uncommon.³⁰ An alternative account where definite articles occupy a distinct head in the main *xnP* along the lines of (214) may seem more attractive.

(214)



The fact that Khoekhoe has postpositions, however, would lead to a violation of FOFC for this language. If one adopted the hypothesis that the phrase-initial articles are heads, FOFC would exclude these head-initial DPs as complements of a head-final PP. Therefore, I assume a structure like (213) for Khoekhoe.

³⁰It seems theoretically desirable to posit Spec-Head agreement for definiteness so that the [DEF] feature shows up in the main *xnP* projection line. I am not aware of morphological evidence for such agreement. A potential syntactic argument in favour of such agreement might be if Khoekhoe *xnPs* displayed definiteness effects similar to the exclusion of definite expressions in existential contexts in English, e.g. **There are the animals in the garden*. If such effects are unattested in Khoekhoe, it would suggest that there is no definiteness agreement. Incidentally, it would also provide evidence against the structure in (214).

3.4.2 Basque proximate plural

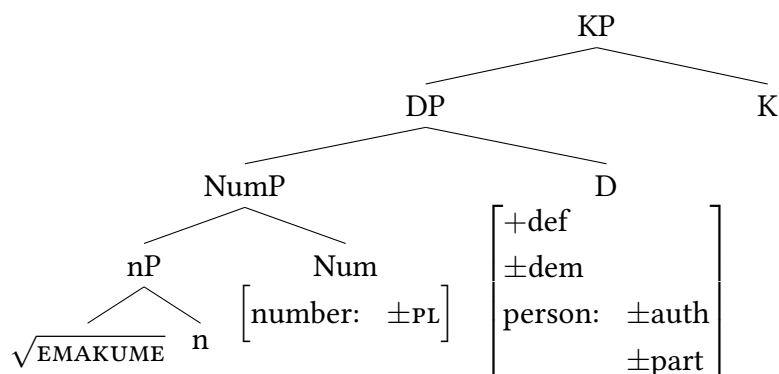
In chapter 2 section 2.3.4.1, I reviewed arguments that the Basque pronoun *gu* ‘we’ in constructions like *gu emakumeok* ‘we women’ is not a pronominal determiner, particularly Artiagoitia’s (2012, 32) observation that if Basque had pronominal determiners, they would be expected to occur in *xnP*-final position like the definite article. As shown in (215), that is not the case.

- (215) a. English: we tradesmen / you idiots Abney 1987: 282
 b. Basque: *merkatari gu / *tentel zuek Artiagoitia 2012: 32, (26)

In this section, I elaborate on my suggestion in chapter 2 that Basque nonetheless shows evidence for pronominal or ‘personal’ determiners in the form of the proximate plural marker *-ok* and personal uses of demonstratives. The ordering difference from more familiar pronominal determiner constructions is due to the head-finality of Basque and the ungrammaticality of the forms in (215b) is due to morphological properties of the vocabulary items available for realising the D head.

Structurally, I assume that D carries interpretable person features as in (216) and that Num head-moves and fuses with D before vocabulary insertion, accounting for the fact that number is always marked on the determiner. Basque has no grammatically active gender features. The K head hosts the grammatical cases ergative, genitive and dative, but will play no major role here. For further details on these assumptions, see Höhn (2012a, 2014a) and works cited there.

(216)



Recall that the use of *-ok* seems to be mandatory in first and second person plural contexts like (217) in western varieties of Basque, cf. (70) from chapter 2 section 2.3.4.1. Speakers of central varieties only required the use of the inclusory plural in first plural contexts (218a), while the plain article was used in second person plural contexts (218b).³¹

³¹Note that the proximate plural morpheme is syncretic for absolutive and ergative case.

Word order

like *guk ikaselok* in (218a) seem to form a distinct *xnP* from that containing the full noun and the determiner *-ok*. Artiagoitia (2012: sec. 5) proposes to treat these structures parallel to ‘doubly determined’ DPs observed in western varieties of Basque, which have *xnP*-initial demonstratives in addition to the phrase-final marking by a demonstrative or article also found in other dialects, see (220).

- (220) *hau neska gazte-(au/ a)* [Western Basque]
this girl young-this DET
‘this young girl’ after Artiagoitia 2012: 68, (106a)

Artiagoitia suggests that doubly determined DPs – with personal pronouns or demonstratives – do not involve loose apposition, based on the lack of “a pause between the personal pronoun and the rest of the complex DP” (Artiagoitia 2012: 66).³³ Furthermore, he observes that both the pronoun and the remaining DP complex have to show independent case marking, see the independent ergative marker *-k* in (218a) and the western Basque example in (221) in contrast to non-restrictive (close) appositions, which only allow one set of case markers at the right edge of the whole construction, see (222).³⁴

- (221) (*horr-ekin/ *hori*) *neska-orr-ekin* [Western Basque]
that-with that girl-PROXART-with
‘with that girl’ after Artiagoitia 2012: 69, (108)

- (222) a. *Axular nafar fin-a-rekin*
Axular navarrese fine-DET-with
‘With Axular the fine Navarrese’
b. **Axularr-ekin nafar fin-a-rekin*
Axular-with navarrese fine-DET-with
‘With Axular with the fine Navarrese’ after Artiagoitia 2012: 67, (102)

³³Notice that it is not entirely clear if this applies to central varieties of Basque. Elicitation from a speaker of a central variety suggested a preference for the use of commas, and potentially a preference for a break, in contexts like (i) where the *xnP* contains a modifier. In contrast, commas and the corresponding break seem not to be required in western varieties. While it remains to be seen if this is a stable dialectal difference, such contrasts may suggest that prenominal pronouns are subject to different analyses in different varieties of Basque.

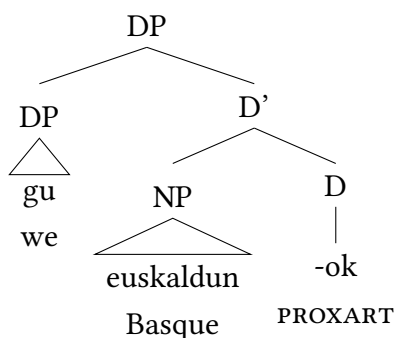
(i) *Zuek, unibertsitate-ko irakasle-ak, primeran bizi zarete.* [Central Basque]
you.PL university-LNK teacher-DET.PL.ABS very.well live AUX.2PL.ABS
‘You, the university teachers, live very well.’

³⁴Artiagoitia mentions an exception for long appositions, which allow case marking on the first part. However, these cases also require a pause.

3.4 Prenominal demonstratives in languages with enclitic nominal person

Artiagoitia proposes that the phrase-initial pronoun or demonstrative in these doubly determined constructions is located in SpecDP (223). This analysis resembles that sketched in (209a) above for the other languages with clitic person marking.

(223)



‘we Basques’

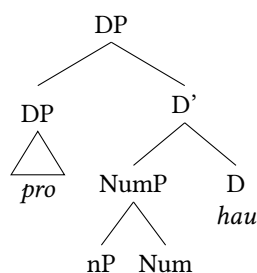
Artiagoitia 2012: 67, (104)

While I largely follow Artiagoitia’s argument, I am sceptical about two aspects of his analysis. First, he suggests that the proximate/inclusive article *-ok* is an ‘agreeing D’, introducing a split between D heads with agreeing, unvalued and presumably uninterpretable person features, and such with fully specified and interpretable person features. This implies that determiners occurring prenominal in SpecDP have interpretable features and those heading the complete DP do not. Such an approach would require some additional mechanism to regulate the distribution of ‘agreeing’ D heads and those with valued person (and number) features.³⁵ Possibly, DPs with valued ϕ -features could be identified as intransitive determiners. If the D heads realised as *gu* or *zuek* are only available in intransitive variants, this would provide a means of excluding postnominal adnominal pronouns as in (215b).

However, this raises a further question. While the notion of intransitive determiners has been popular since Abney’s (1987) proposal, it is incompatible with the view that functional categories cannot appear on their own outside an extended projection (cf. especially Panagi-

³⁵ Another consequence would be that third person xNPs in most varieties of Basque would require a null pronoun only to supply the phrase-final determiner with person features as in (i). Only in western Basque could this position be realised by a demonstrative.

(i)



otidis 2002). As discussed in chapter 1, functional heads require a categorial feature in their complement domain. Consequently, D cannot be intransitive in the model of syntax assumed here and the DP located in SpecDP has to consist of a full *xnP* including at least a categoriser *n*. It is not clear how the syntax could make sure that interpretable person features are only found on Ds without an overt complement, so as to avoid wrongly generating structures like (215b).

My alternative proposal maintains that Basque D always carries interpretable person features as sketched in (216) above. What rules out postnominal pronouns as in (215b) are contextual requirements on vocabulary items (see also chapter 5). VIs realising personal pronouns have a contextual restriction against any overt material to their left inside their spell-out domain. The VIs for *gu* ‘we’ and *zuek* ‘you (pl.)’ are illustrated in (224) alongside the proximate plural *-ok* (western varieties) and two allomorphs for the plain article as proposed by Höhn (2014a: 164, (32)).³⁶

(224)	#+D[def, +auth, pl]	↔	<i>gu</i>	/	ϕ [__
	#+D[def, -auth, +part, pl]	↔	<i>zuek</i>	/	ϕ [__
	#+D[def, +part, pl]	↔	<i>-o(k)</i>		
	#+D[def, pl]	↔	<i>-e</i>		
	#+D[def]	↔	<i>-a</i>		

Given a D node specified as [+auth, +part, pl], *gu* and *-ok* compete for insertion, but the former can only be inserted if there is no overt material in the complement domain of D, particularly no noun or adjective. Examples like **merkatari gu* (intended: ‘we merchants’) from (215b) cannot be generated because the contextual restriction of the VI *gu* is not satisfied and the proximate plural determiner is inserted instead.

This concludes the discussion of languages with clitic nominal person marking. For further discussion regarding the interaction of person and demonstratives in Basque see chapter 7 section 7.2.3.

3.5 Ambidirectional APCs

The five languages with ambidirectional APCs described in section 2.3.3 are listed in (225).

(225)	Kalaallisut
	Imonda

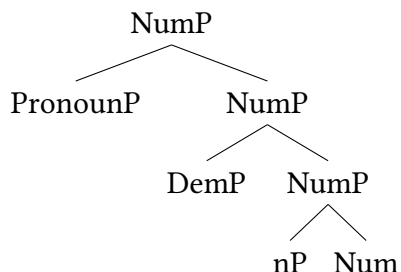
³⁶For criticism of a potential loss of generalisations by treating such effects as the result of (“accidental”) lexical properties see Williams (1994) and for a possible counter-argument see Caha (2009: 106f.). For further discussion of the general issues see e.g. Bobaljik (2002).

Pitjantjatjara
 Kuku Yalanji
 Kobon

With the exception of Kobon, the ambidirectionality in these languages is not restricted to APCs, but demonstratives can also occur in prenominal or postnominal position. Such flexibility in word order would be uncommon for heads. Moreover, all these languages have postpositions, so the possibility of prenominal APCs would violate FOFC if the adnominal pronoun was a head. I therefore suggest analysing adnominal pronouns and demonstratives as adjuncts in these languages, which allows for their realisation on either side of the constituent they adjoin to. I have nothing more to say about Kalaallisut and Imonda due to the scarce data.

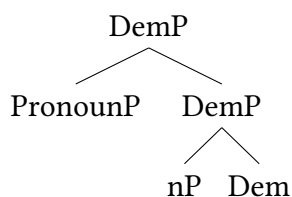
For the Pama-Nyungan languages Pitjantjatjara and Kuku Yalanji, the fact that pronouns and demonstratives can co-occur (see chapter 7) implies that they realise distinct positions. Unfortunately, I have no reliable data regarding the range of possible relative orders of the demonstrative and pronoun, but as a null hypothesis I assume here that they are both adjuncts to NumP as in (226). Semantic restrictions of the modifiers themselves aside, this would predict free ordering. If there turn out to be restrictions, this analysis would have to be revised in favour of distinct attachment sites for pronouns and demonstratives.

(226)



If Kobon is correctly identified as having ambidirectional APCs, the contrast between the postnominal distribution of demonstratives and the ambidirectionality of adnominal pronouns suggests that they represent distinct classes here, too. On this view, Kobon should also allow PPDCs where the Dem head and the adnominal pronoun are overtly represented like the languages discussed in chapter 7 and demonstratives might realise a head-position in the *xnP* similar to my claim for the other two Madang languages Amele and Usan in section 3.3, but in contrast to those languages adnominal pronouns would be adjuncts to DemP rather than independent heads, see (227).

(227)



However, as noted in chapter 2 section 2.3.3, Kobon might actually only have postnominal APCs like Amele. This would be consistent with the purely postnominal distribution of demonstratives and result in a consistent pattern of ambidirectional demonstratives in the remaining ambidirectional APC languages. On this view, Kobon postnominal pronouns could realise a head in the *xnP*. Whether that would be identical to the Dem head in (227) would depend on the empirical question of whether the language has PPDCs. Note that the absence of PPDCs would favour rejecting the classification of Kobon as having ambidirectional APCs. Empirical assessment of these analytical options remains for future research.

3.6 Summary

Adopting Biberauer et al.'s (2014a) FOFC as a diagnostic, I have identified languages whose word order properties in APCs are problematic for the pronominal determiner analysis. Adpositions have generally been analysed as part of the *xnP*, but Hungarian (and possibly Abkhaz) data suggest that if FOFC is to be retained, adpositions cannot form part of the *xnP* in some languages. Further, more widely evidenced points of variation are listed in (228b–d).

- (228)
- a. adpositions forming part of *xnP*
 - b. headedness: initial or final head encoding person features
 - c. status of adnominal pronouns/demonstrative modifiers: heads or phrases
 - d. class identity of pronouns and demonstratives

Head-finality is taken to account for postnominal person marking and I have suggested that languages with pronominal APCs and postpositions do not show pronominal determiners, but merge adnominal pronouns as specifiers or adjuncts. These points of variation may play a role in explaining the crosslinguistic prevalence of pronominal APCs observed in chapter 2. Specifiers seem to be crosslinguistically to the left (e.g. Kayne 1994), so adnominal pronouns that are specifiers are expected to occur pronominally. Moreover, the asymmetry captured by FOFC means that adnominal pronouns realising a head can only appear postnominally if the lower part of the *xnP* is consistently head-final. This seems to hold for the languages

with postnominal APCs and enclitic person marking (see chapter 2).³⁷ Prenominal pronouns representing a head, on the other hand, are compatible with head-initial as well as head-final complements. Overall, the range of constructions potentially yielding prenominal APCs is larger than of those that can result in postnominal APCs.³⁸ I make no predictions about the directionality of adjuncts and if anything ambidirectional APCs are the most likely candidates for an adjunct analysis.

Another word order-related observation in chapter 2 is that demonstratives and adnominal pronouns tend to occur on the same side of the noun. This is expected to hold in languages where pronouns and demonstratives form a distributional class, which seems to be a common pattern, see Blake (2001), Choi (2014a,b) and chapter 6. Building on my proposal for adnominal pronouns, this implies that there is crosslinguistic variation concerning whether demonstratives have head or phrasal status, which should pattern with that of adnominal pronouns where they form a distributional class with demonstratives.

The languages addressed in section 3.2 realise adnominal pronouns and demonstratives on opposite sides of the noun, and for some of these languages – notably the Austronesian ones – I have argued that person features and demonstratives are encoded in distinct syntactic positions. This corresponds to the observation that pronouns and demonstratives can actually co-occur in personal pronoun-demonstrative constructions (PPDCs) in those languages, as further discussed in chapter 7. Most languages with enclitic person marking (section 3.4) have *xnP*-initial demonstratives. Considering that their *xnP*-final person markers indicate a head-final structure, I suggest analysing their demonstratives as phrasal.

The next chapter will turn to APC data indicating a dissociation of person features and definiteness.

³⁷Apart from Bilua, all these languages are also verb-final in the sentential domain.

³⁸Processing considerations could also promote a phrase-initial position of person information, following Hawkins & Gilligan's (1988) proposal for the crosslinguistic suffixation preference. Of course, this would require a modification to Hawkins & Gilligan's (1988) original proposal insofar as it would require person features to be more salient even than the lexical information of the noun.

Chapter 4

APCs and articles

This chapter deals with languages that do not show the complementary distribution between definite articles and adnominal pronouns predicted by the pronominal determiner analysis. Section 4.1 discusses the structure of nominal person in languages that require the presence of definite articles in APCs, while section 4.2 addresses languages without definite articles.

4.1 Definite articles in APCs

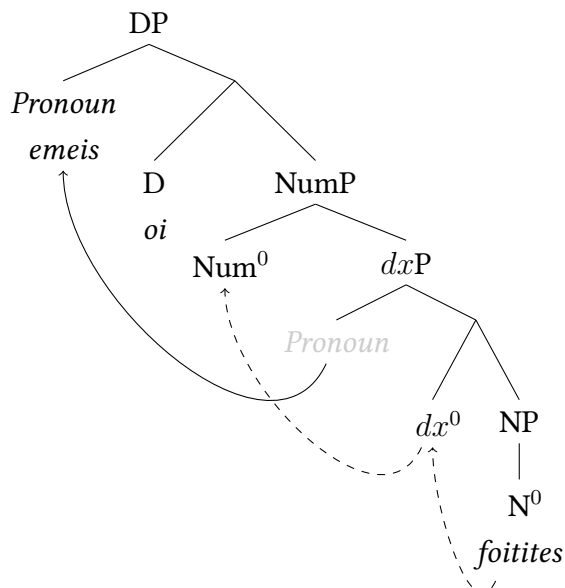
One challenge to the pronominal determiner analysis of APCs comes from languages with definite articles in APCs, as illustrated by the Catalan example in (229), see also chapter 2 section 2.4. I will refer to such APCs with definiteness marking as dAPCs.

- (229) nosaltres els estudiants [Catalan]
we the.PL students
'we students'

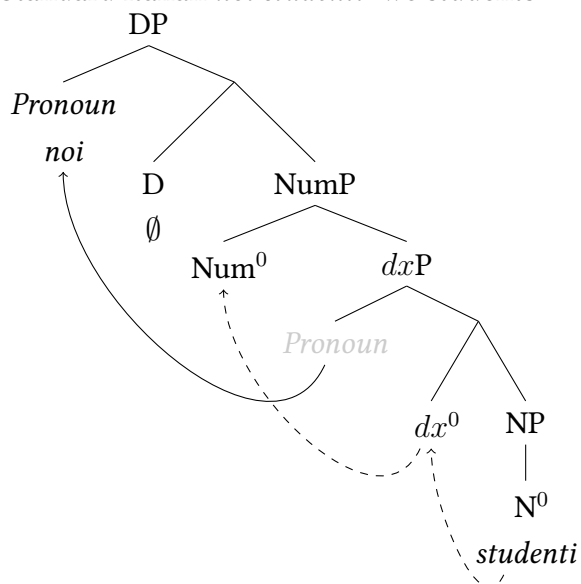
The co-occurrence of adnominal pronouns and definite articles defies the central hypothesis of the pronominal determiner analysis, namely that they realise the same syntactic position. There are two general ways of approaching this problem, largely depending on one's assumptions regarding the universal base hypothesis (e.g. Cinque 1999, Kayne 1994). Choi (2013, 2014a,b) takes the existence of these constructions as evidence that the pronominal determiner analysis is wrong and proposes a unified account for APC structures with and without definite articles. As sketched in (230ab) for Standard Modern Greek and Standard Italian respectively, he suggests that adnominal pronouns universally move to Spec,DP from a lower position.

(230) Analyses after Choi (2014b: 141)

a. Greek *emeis oi foitites* ‘we (the) students’



b. Standard Italian *noi studenti* ‘we students’

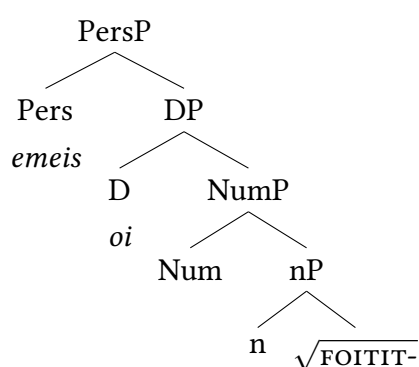


Assuming that adnominal pronouns are essentially demonstratives, Choi 2014b: 184, fn. 8 suggests that languages with and without a definite article in APCs simply differ regarding their setting of Alexiadou et al.’s (2007) Doubly-filled DP filter. Like the present work, Choi’s account is embedded in the framework of DM. This means that a given position is only phonologically “filled” post-syntactically, at spell-out. Consequently, the relevant difference

between Greek and Italian in (230) only concerns the phonological realisation of D and, all else being equal, one should not expect syntactic differences between the two types of languages.

Höhn (2012b, 2016) puts forth an alternative account acknowledging the impact of data like (229) without rejecting the pronominal determiner analysis for languages without definite articles in APCs. On this view, the observable variation in APCs is indicative of syntactic variation in the location of person features spelled out by adnominal pronouns. Languages like English, German or Italian, which lack definite articles in APCs, encode person on D in accordance with the pronominal determiner analysis. Languages with dAPCs, on the other hand, encode person on a separate functional head Pers, as sketched in (231).¹

(231) Analysis following Höhn (2016)



I take up the second line of argument and retain the pronominal determiner analysis for languages lacking a definite article in APCs and pursue the hypothesis that languages requiring an article in APCs split the person features from the definiteness features of D along the lines of (231). For potential exceptions see the discussion of unagreement in chapter 6.

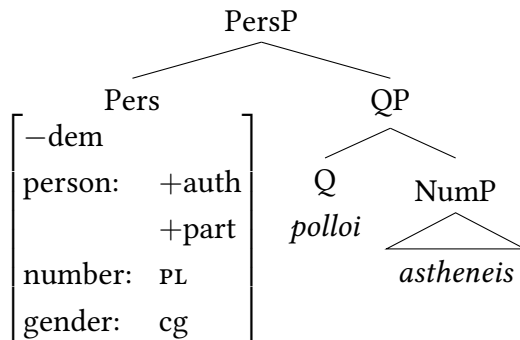
4.1.1 Person in non-definite contexts

An argument in favour of splitting person features from definiteness in these languages, suggesting that the two categories are not (necessarily) identical (*pace* the implications of Longobardi 2008), stems from the observation that languages with dAPCs allow quantified subjects with non-third person agreement as illustrated in (232) for Spanish and Greek.² This has been treated as part of the unagreement phenomenon, discussed in more detail in

¹Cf. also Giorgi & Pianesi's (1997) Feature Scattering, Bobaljik & Thráinsson's (1998) correlation between verb raising and the possible number of verbal inflectional morphemes and Pykkänen's (2008) Voice bundling parameter.

²This is confirmed for Modern Greek, Spanish, Catalan, Galician, Bulgarian, Pomak, Aromanian and Hausa. There is some crosslinguistic variation as to the range of quantifiers allowed in these constructions, and there are a few languages with definite articles in APCs that do not seem to allow this construction, notably Romanian and the Semitic languages. For further discussion see Höhn (2016) and chapter 6.

(234) Structure for 1PL version of Greek *polloi astheneis* ‘many patients’



Under Choi’s (2014b) proposal these data remain unexplained because the difference between languages with and without definite articles in APCs is just a matter of the overtness of D. If there was indeed no structural difference in the location of nominal person between these two types of languages, the variation in the availability of quantificational unagreement would have to be treated as an independent phenomenon. This seems to be missing the likely connection between the form of APCs and the availability of quantificational unagreement. Other analyses that have been proposed for quantificational unagreement (Ackema & Neeleman 2013, Suñer 1988) do not make reference to nominal person and hence have no direct bearing on the present discussion, but see Höhn (2014b, 2016) and chapter 6 for further discussion.

4.1.2 Rejecting an appositive analysis

This section addresses a potential alternative analysis of dAPCs as instances of apposition, focusing on Greek as an example. After establishing the distinction between close and loose apposition in Greek, I present arguments against treating dAPCs as cases of apposition of either type.⁵

Stavrou (1995) presents a series of reasons to distinguish two types of apposition in Modern Greek, illustrated by string-equivalent sequences like *o aetos to pouli* ‘the eagle (which is) a bird’ and *o aetos, to pouli* ‘the eagle, the bird’ (cf. also Stavrou 1990-1991, Lekakou & Szendrői 2012 and references cited there).⁶ The differences include different intonational patterns (i.e. comma intonation in loose apposition), the restrictions of discourse markers like *diladi* ‘namely’ to loose apposition and the fact that only loose apposition may involve an indefinite DP (cf. also the discussion of (240) below):

⁵Much of this subsection has been published in Höhn (2016) and some of the arguments presented here were also used in Höhn (2012b).

⁶Her terms “non-appositions” and *epexegetis* seem to correspond to the notions of close and loose apposition respectively, cf. Lekakou & Szendrői (2007, 2012).

APCs and articles

(235) close apposition:

**enas kathigitis o Georgiadis/*o Georgiadis enas kathigitis*

loose apposition:

enas kathigitis, diladi o Georgiadis ‘a professor, namely Georgiadis’

Stavrou (1995: 221) argues that the contrast in (236) arises because in loose apposition “the first definite noun phrase [...] itself denotes a specific referent already established in the linguistic context or uniquely retrievable from the situation of discourse” (Stavrou 1995: 221). Accordingly, the loose apposition in (236b) is deviant because it is tantamount to saying ??*Den eida to Gianni, alla to Gianni* ‘I didn’t meet John, but John’, while the close apposition in (236a) is felicitous.

(236) a. Den eipa oti eida to Gianni to filo mou, alla
 NEG said.1SG that saw.1SG DET.ACC.SG Giannis DET.ACC.SG friend my but
 to Gianni ton kathigiti.
 DET.ACC.SG Giannis DET.ACC.SG professor
 ‘I didn’t say I saw John my friend, but John the professor.’

b. ??Den eipa oti eida to Gianni, to filo mou, alla
 NEG said.1SG that saw.1SG DET.ACC.SG Giannis DET.ACC.SG friend my but
 to Gianni, ton kathigiti.
 DET.ACC.SG Giannis DET.ACC.SG professor
 ‘I didn’t say I saw John, my friend, but John, the professor.’

Stavrou 1995: 221, (3)-(4)

Greek APCs, on the other hand, pattern with close apposition in this respect as shown by the contrast of the APCs in (237a) with the string-equivalent loose apposition in (237b).

(237) a. De chasame mono emeis oi akadimaikoi, alla oloi emeis
 NEG lost.1PL only we DET.NOM.PL academics but all we
 oi polites.
 DET.NOM.PL citizens

‘Not only us academics lost, but all of us citizens.’

b. #De chasame mono emeis, oi akadimaikoi, alla oloi emeis,
 NEG lost.1PL only we DET.NOM.PL academics but all we
 oi polites.
 DET.NOM.PL citizens

Further, Pesetsky's (1978) argument from the wider scope options of loose apposition, discussed with respect to English pronominal determiners in chapter 1 section 1.2.3.1, can be adapted to dAPCs of the Greek type. Greek allows for a more fine-grained manipulation of the attachment site of the apposition, since appositions match the case of the element they characterise. In (238a), the loose apposition – marked prosodically and by the availability of *diladi* 'that is' – matches the case of the pronoun, yielding a contradictory low attachment interpretation where "us" is simultaneously exhaustively characterised as consisting of "the linguists" and "the physicists". In contrast, when the apposition case-matches the whole quantifier phrase as in (238b), the resulting high attachment interpretation is fine as in Pesetsky's (1978) English example. Notice that, although only the second sentence is felicitous, both attachment possibilities are grammatical for loose appositions.

- (238) a. #Merikoi apo mas, (diladi) tous fysikous, pistevoume, oti
 some.NOM.PL of us.ACC that.is DET.ACC.PL physicists believe.1PL that
 alloi apo mas, (diladi) tous glossologous, einai treloi.
 others.NOM.PL of us.ACC that.is DET.ACC.PL linguists are crazy
 'Some of us, namely of the physicists, believe that others of us, namely of the linguists, are crazy.'
- b. Merikoi apo mas, (diladi) oi fysikoi, pistevoume, oti
 some.NOM.PL of us.ACC namely DET.NOM.PL physicists believe.1PL that
 alloi apo mas, (diladi) oi glossologoi, einai treloi.
 others.NOM.PL of us.ACC namely DET.NOM.PL linguists are crazy
 'Some of us, (namely) the physicists, believe that others of us, (namely) the linguists, are crazy.'

While APCs also yield an infelicitous low attachment reading under case matching between the pronominal and the following DP, cf. (239a), the high attachment configuration involving case matching with the quantifier is not even grammatical as illustrated in (239b). This represents a further clear contrast between loose apposition and APCs.

- (239) a. #Merikoi apo mas tous fysikous pistevoume, oti
 some.NOM.PL of us.ACC DET.ACC.PL physicists believe.1PL that
 alloi apo mas tous glossologous einai treloi.
 others.NOM.PL of us.ACC DET.ACC.PL linguists are crazy
 'Some of us physicists believe that others of us linguists are crazy.'

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- b. *Merikoi apo mas oi fysikoi pistevoume, oti
some.NOM.PL of US.ACC DET.NOM.PL physicists believe.1PL that
alloi apo mas oi glossologoi einai treloi.
others.NOM.PL of US.NOM DET.NOM.PL linguists are crazy

Finally, the definiteness effect observed for English-type pronominal determiners, see example (34) in chapter 1, also holds for Greek dAPCs. An indefinite phrase can be attached to a pronoun as a loose apposition (240a), but cannot appear in an APC (240b).

- (240) a. emeis, (diladi) kapoioi foitites apo Patra
we that.is some students from Patras
'we, (that is) some students from Patras'
- b. *emeis kapoioi foitites apo Patra
we some students from Patras

This all strongly suggests that dAPCs have to be distinguished from loose apposition, and in several respects behave rather similarly to close apposition. But in spite of this similarity in terms of the tight structural coherence displayed by these two constructions, there are reasons not to view dAPCs as simply a special form of close apposition either.

Lekakou & Szendrői (2007, 2012) observe that close apposition in Greek involves a symmetric relationship between two nominal phrases, so that "neither subpart of a close apposition is the unique head of the construction" (Lekakou & Szendrői 2012: 114; cf. also Roehrs 2005 for a different implementation of that insight). They note an important contrast with APCs in this respect.

Consider the following examples from Lekakou & Szendrői (2012: 114, (12); transcription adapted). While a predicative adjective can agree in gender with either component of an appositive irrespective of their linear order (241ab), the APC in (241c) exclusively triggers first plural agreement on the verb. If the APC consisted of a close apposition of two DPs, first plural *emeis* and third plural *oi glossologoi*, we would instead expect a similar symmetry in agreement possibilities for person as in the other two examples for gender.

- (241) a. O aetos to pouli einai megaloprepos/megaloprepo.
the.M eagle.M the.N bird.N is majestic.M/majestic.N
- b. To pouli o aetos einai megaloprepos/megaloprepo.
the.N bird.N the.M eagle.M is majestic.M/majestic.N
'The eagle that is a bird is majestic.'

- c. Emeis oi glossologoi peiname/*peinane.
 we.NOM the linguists.NOM are.hungry.1PL/are.hungry.3PL
 ‘We linguists are starving/hungry.’

Another observation highlighting the asymmetry between the pronominal and the “full” nominal part of APCs is that only one linear order is possible, i.e. the pronominal must be phrase-initial as shown in (242).

- (242) a. Gia afto stenachoriomaste emeis oi foitites.
 for that worry.1PL we DET.NOM.PL students
 ‘That’s why we students are worried.’
- b. *Gia afto stenachoriomaste oi foitites emeis.
 for that worry.1PL DET.NOM.PL students we

I follow Lekakou & Szendrői’s conclusion that APCs are not close appositions and that “arguably the pronominal part is the unique head” (Lekakou & Szendrői 2012: 114) of Greek APCs.

Based on the above, I conclude that dAPCs are not appositions. I assume that this is the case not only for Greek but also for most other languages with definite articles in APCs. However, the possibility remains that apparent dAPCs in some languages could involve appositive structures.⁷ This issue would have to be addressed by detailed investigations into the languages in question.

4.2 Article-less languages

This section presents problems raised for the pronominal determiner analysis by languages which generally lack definite articles. This relates to the wider debate about the applicability of Abney’s (1987) DP-analysis to such languages.

On the hypothesis that argumental nominals generally project a DP crosslinguistically (Longobardi 1994, 2005, 2008, Stowell 1991, Szabolcsi 1994), there is no immediate problem for a pronominal determiner analysis of article-less languages. Insofar as a D position is taken to be universally available even though not necessarily realised in all languages, an adnominal pronoun may realise the D position even in languages that do not realise D overtly as an article. On that view, a D head specified for [+participant] would get spelled out overtly by a personal pronoun as expected under the pronominal determiner analysis. In third person

⁷This is independent of the possibility that many, or maybe all, languages with dAPCs may *also* allow appositive structures that are segmentally identical to dAPCs.

contexts, on the other hand, characterised by a [-participant] feature, D receives null spell-out if it is accompanied by overt material in its spell-out domain, that is, in just the environment where D is realised as definite article in languages that have them.

Things get more complicated if one follows the argument that (at least some) article-less languages lack a DP projection (cf. i.a. Cheng & Sybesma 1999, Tomioka 2003 and Bošković 2008, 2009, 2012; see also Chierchia 1998). This would suggest that pronouns in such languages are not instances/realisations of D. In the present context, this raises the question of the appropriate analysis of APCs.

For some of those languages, notably Japanese and Korean, there are good arguments that pronouns behave as nouns (Kuroda 1965: 105, Noguchi 1997, Déchaine & Wiltschko 2002, Panagiotidis 2003b, Neeleman & Szendrői 2007 for Japanese and Sohn 1994: 280 for Korean). Arguments in favour of this view are the open class nature of pronouns in such languages, the possibility of modifying them with adjectives, possessives (243a) and demonstratives (243b), as well as the lack of bound variable readings (243c).

- (243) a. anata-no kanozyo [Japanese]
 you-GEN she
 *‘your she’ (=girlfriend) Noguchi 1997: 777, (29b)
- b. ano kanozyo
 that she
 *‘that she’ Noguchi 1997: 777, (30b)
- c. *Dono zyosei_i-mo [kanozyo_i-ga tensai-da to] omotte-iru.
 every woman-also she-NOM genius-COP COMP think-PRS
 ‘Every woman_i thinks that she_i is a genius.’ Noguchi 1997: 771, (1b)

If Japanese has N-pronouns in Noguchi’s (1997) terminology, the adnominal pronoun and the lexical noun of an APC are predicted to form distinct *xnPs*, precluding the pronominal determiner analysis. Despite differences in the details of their analyses, Noguchi (1997), Furuya (2008) and Inokuma (2009) agree that adnominal pronouns in Japanese form a distinct phrase from the “head noun” of APCs in the language, located in a specifier position. In light of these observations, I propose that Japanese either grammatically encodes person very low in the *xnP*, possibly on the categoriser *n*, or not at all (Longobardi 2008).

As discussed in section 3.1, word order facts provide independent reasons for rejecting the pronominal determiner analysis for languages with postpositions and prenominal adnominal pronouns. Assuming postpositions to form a very high part the *xnP*, lower projections cannot be head-initial following Biberauer et al.’s (2014a) FOFC proposal. This would most likely

apply to any potential head encoding person, be it D or Pers. Consequently, overt adnominal pronouns in these languages should not be analysed as realisations of head positions, making the pronominal determiner analysis inapplicable. This accounts for a large number of the languages without definite articles, listed in (244). Section 4.2.1 will provide a brief discussion of Japanese and Korean APCs as compared to the APCs found in Mandarin.

- (244) Awtuw
Evenki
Finnish
Guugu Yimidhirr
Japanese
Kannada
Kashmiri
Kayardild
Korean
Lezgian
Marathi
Punjabi
Supyire
Tamil
Turkish

Similar issues arise for the languages with ambidirectional APCs listed in (245) and discussed in sections 2.3.3 and 3.5. They all have postpositions and lack definite articles and since they allow pronominal APCs, the above considerations apply. The fact that they appear to show variation in the pre- and post-nominal position of adnominal pronouns adds further complications as discussed in chapter 3 section 3.5. It therefore seems a reasonable working hypothesis that these languages do not have pronominal determiners either and are therefore not relevant to the present discussion.⁸

- (245) Kalaallisut
Imonda
Kobon
Kuku Yalanji
Pitjantjatjara

⁸There may be an argument for the existence of a null definiteness marker in Kobon given that the marking of indefiniteness by the article *ap* is obligatory, with unmarked noun phrases being interpreted as definite (Davies 1989: 150).

The remaining languages without overt articles not covered by the above considerations are listed in (246). All of them have prepositions and pronominal APCs, so the null hypothesis that nominal person is encoded on a head in the *xnP* is not ruled out by FOFC as in the languages discussed above. For the languages in (245a), I remain agnostic with respect to the question of whether the head in question is D, in line with the pronominal determiner analysis, or some other functional head. The languages in (245b) all have postnominal APCs and alternatives to the pronominal determiner analysis were suggested for Fore, Yagaria and Amele in chapter 3 section 3.3, while only Warlpiri was treated as potentially having pronominal determiners. The next two subsections discuss the languages in (245c).

- (246) a. Indonesian
 Kristang
 Persian
 Babungo
 Nkore-Kiga
 Swahili
 Wari'
- b. Warlpiri
 Fore
 Yagaria
 Amele
 Kaera
 Sawila
- c. Mandarin
 BCMS
 Russian
 Polish

4.2.1 Mandarin APCs compared to Japanese and Korean

Li (1998, 1999a,b, 2007, 2014) proposes that Mandarin has DP arguments (*pace* Cheng & Sybesma 1999) and contrasts it with another article-less language, Japanese.

She observes that both languages have 'adnominal linker' morphemes (for Mandarin e.g. Cheung 2012, von Prince 2008; for Japanese Hall 2012; for the terminology and further references see den Dikken & Singhapreecha 2004, Höhn 2012a, Rubin 2002 and von Prince 2008) for certain types of nominal modifiers. In Japanese, demonstratives need to be marked

by the linker *-no* as shown in (247a), just like other nominal modifiers in the language. In contrast, Mandarin demonstratives are not marked by the linker morpheme *de*, see (247b).⁹

- (247) a. ko-no/ so-no/ a-no [Japanese]
 this-LNK that-LNK that-LNK
- b. *zhe-de/ na-de [Mandarin]
 this-LNK that-LNK after Li 2007: 98, (43)

Another, presumably related difference concerns the freedom of word order. While Mandarin only allows “the fixed word order of [Demonstrative + Number + Classifier + Noun] without [the linker morpheme; GFKH] *de*” (Li 2007: 98) as illustrated by the contrast in (248), Japanese allows both orders of demonstrative and number+classifier as shown in (249). I assume that this flexibility is connected to the obligatory presence of the linker morpheme in Japanese. If modifiers marked this way are merged as adjuncts, the relative word order freedom in Japanese is expected. Mandarin demonstratives, in contrast, seem to be linked to a particular position in the *xnP*, although I remain agnostic as to whether that would be a phrasal specifier position or a head.

- (248) a. wo maile zhe san-bang tangguo. [Mandarin]
 I bought this three-pound candy
 ‘I bought these three pounds of candy.’
- b. *wo maile san-bang zhe tangguo.
 I bought three-pound that[sic!] candy Li 2007: 100, (48)
- (249) a. ko-no san-satu-no hon [Japanese]
 this-LNK three-CLF-LNK book
 ‘these three books’
- b. san-satu-no ko-no hon
 three-CLF-LNK this-LNK book
 ‘these three books’ Li 2007: 100, (49)

Similar to the variability found in demonstrative positioning in Japanese, Choi (2014b) observes that Korean adnominal pronouns can either precede or follow adjectives, see (250).

⁹Glossing modified throughout. Li glosses Japanese *-no* and Mandarin *de* as NO and DE respectively.

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- (250) a. **Wuli ttokttokhan** enehakcatul [Korean]
we smart linguists
'We smart linguists'
- b. **Ttokttokhan wuli** enehakcatul
smart we linguists
'We smart linguists' Choi 2014b: 151, (15)

This possibility can be largely replicated in Japanese, with the provision that my consultant suggests that (251b) is slightly degraded in comparison to (251a). This may be partly related to a difference in meaning between both orders. As indicated in the translation of (251b), the adjective gets an appositive reading suggesting that all students are smart, while (251a) allows the possibly more salient intersective reading of the group of those students who are smart (and including the speaker).

- (251) a. wareware kasikoi gakusei [Japanese]
we smart student
'we smart students'
- b. ?kasikoi wareware gakusei
smart we student
'we students, who by the way are all smart'

In contrast to Korean and Japanese, Mandarin only allows pronoun-initial order in APCs, as shown in (252). This is independent of the optional use of the linker *de* with the adjective.

- (252) a. women congming-(de) xuesheng [Mandarin]
we smart-LNK student
'we smart students'
- b. *congming-(de) women xuesheng
smart-LNK we student

The same restriction to pronoun-initial order is also found in APCs with numerals, see (253). This directly mirrors the strict ordering observed in Mandarin for demonstratives and number-classifier sequences observed in (248) above.

- (253) a. women san-ge xuesheng [Mandarin]
we three-CLF student
'we three students'

- b. *san-ge women xuesheng
three-CLF we student

Although Japanese shows a preference for the pronoun-initial version in (254), both orders are in principle possible in these sorts of constructions.¹⁰

- (254) a. wareware san-nin-no gakusei [Japanese]
we three-CLF-LNK student
'we three students'

- b. ?san-nin-no wareware gakusei
three-CLF-LNK we student

Finally, APCs involving both numerals and adjectives corroborate the contrast between Mandarin and Japanese with respect to the word order flexibility of APCs. Mandarin seems largely restricted to the order pronoun-numeral-adjective-noun, see (255).¹¹

- (255) a. women san-ge congming-de xueshen [Mandarin]
we three-CLF smart-LNK student
'we three smart students'

- b. ?*san-ge women congming-de xueshen
three-CLF we smart-LNK student

- c. ?*women congming-de san-ge xueshen
we smart-LNK three-CLF student

¹⁰Inokuma (2009: 35, (19)) gives an ungrammatical judgement for example (i).

- (i) ***San-nin-no** watashi-tachi daigakuinsei-ga ronbun-o shippitsushita.
three-CLF-GEN 1SG-TACHI grad.student-NOM paper-ACC wrote

The difference in judgement from the structurally parallel (254b) is probably due to inter-speaker variation. Yasutada Sudo (p.c.) suggests that there could also be a problem with the pragmatic naturalness of (i) and provides (ii) as a less marked example. The difference in choice of pronoun (*watashi-tachi* 'we' or *wareware* 'we') is irrelevant.

- (ii) San-nin-no wareware nihonjin-ga resutoran-ni haitta totan, dono kyaku-mo
three-CLF-GEN we Japanese-NOM restaurant-to enter the.moment which customer-MO
kochira-o muita.
hither-ACC turned

'The moment we three Japanese entered the restaurant, all the customers turned toward us.' (Yasutada Sudo, p.c.)

¹¹For (255b), one consultant preferred a possessive reading of the pronoun ("our three smart students") to the intended APC-reading, while the other one rejected the phrase on the intended APC-reading. One consultant accepted (255c), but clearly preferred (255a), while the other one found (255c) "very odd".

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- d. *congming-de women san-ge xueshen
 smart-LNK we three-CLF student
- e. *san-ge congming-de women xueshen
 three-CLF smart-LNK we student
- f. *congming-de san-ge women xueshen
 smart-LNK three-CLF we student

Japanese again appears to be more flexible. As illustrated in (256), not only pronoun-numeral-adjective-noun orders are fine, but also numeral-pronoun-adjective-noun and, more marginally, pronoun-adjective-numeral-noun and adjective-pronoun-numeral-noun orders.¹² The only orders clearly rejected seem to be those where the adnominal pronoun is preceded by both a numeral and an adjective (256ef).

- (256) a. wareware san-nin-no kasikoi gakusei [Japanese]
 we three-CLF-LNK smart student
 ‘we three smart students’
- b. san-nin-no wareware kasikoi gakusei
 three-CLF-LNK we smart students
- c. ?wareware kasikoi san-nin-no gakusei
 we smart three-CLF-LNK students
- d. ?kasikoi wareware san-nin-no gakusei
 smart we three-CLF-LNK students
- e. *san-nin-no kasikoi wareware gakusei
 three-CLF-LNK smart we students
- f. *kasikoi san-nin-no wareware gakusei
 smart three-CLF-LNK we students

In summary, the difference between Japanese and Mandarin regarding the flexibility of demonstrative placement seems to extend to APCs, where Japanese (and Korean) adnominal pronouns seem to allow a wider range of placement options than adnominal pronouns in Mandarin.

In light of the arguments that Japanese and Korean pronouns behave like nouns (see the discussion surrounding example (243) above), I propose that these languages either encode grammatical person fairly low in the *xnP*, possibly as low as *n*, or do not grammaticalise

¹²I have no explanation for why (256b) is judged better than (254b) above, but see footnote 10.

person at all (Longobardi 2008, Saito 2007). In either case, this suggests that APCs in these languages are not pronominal determiner structures, in line with the discussion in chapter 3 section 3.1 (see also Furuya 2008 and Inokuma 2009 for discussion and two potential analyses of Japanese). Following Li (2007), the more restricted positioning of demonstratives and adnominal pronouns in Mandarin seems to indicate that they are not mere adjuncts, but integrated in the nominal projection line.¹³ This does, of course, not necessarily mean that the language has pronominal determiners proper of the type found in English, especially considering that adnominal pronouns are not in complementary distribution with demonstratives in Mandarin. For further discussion of the interaction of adnominal pronouns and demonstratives in Mandarin, Korean and Japanese see chapter 7 section 7.1.

4.2.2 APCs in article-less Slavic languages

The status of APCs in the article-less Slavic languages is unclear. An appositive analysis of APCs has been suggested for Bosnian-Croatian-Montenegrin-Serbian (BCMS) and Polish (Progovac 1998 for BCMS and Rutkowski 2002, Willim 2000 for Polish) over a pronominal determiner analysis, although the arguments against the latter are largely based on the lack of singular and third person APCs in these languages and it is not clear how an appositive analysis fares better in explaining these restrictions.¹⁴ Indeed, the third person restriction actually seems to pattern with the observations for most other Indo-European languages with pronominal determiners (chapter 2 section 2.6). As further discussed in chapter 5 section 5.1.3, this may suggest that the Slavic languages also have pronominal determiners. At least, this common pattern does not lend itself to showing a structural difference between Slavic and languages like English.

As a further potential argument against a pronominal determiner analysis, Bošković (2008: fn. 9) suggests that BCMS pronouns pattern with Japanese ones insofar as they can be modified by adjectives, a claim Bošković (2009) extends to Russian. The argument is illustrated by the contrast between Russian and Macedonian in (257) and (258) respectively. The core observation is that Russian personal pronouns cannot only be modified by adjectives, but also show the case inflection required by their position in the clause. In example (257a), the nominative form *ja* 'I' is used in subject position, while in object position we find the accusative *menja* 'me' (257b). Macedonian, a language with overt definite articles, provides a minimal contrast in (258). A pronoun modified by an adjective can only appear in the default

¹³But see Bošković & Hsieh (2013) for a proposal involving adjunction.

¹⁴See Bošković (2008: fn. 9) and Bošković (2015) for the possibility that pronouns are the only Ds in such languages.

(nominative) form, irrespective of whether the adjective+pronoun construction appears in subject or object position.¹⁵

(257) a. Sil'naja ja smogu ego preodolet'. [Russian]
 strong I will-manage him overcome.
 'The strong me will be able to overcome him.'

b. On ne smožet preodolet' sil'nuju menja.
 he NEG will-manage overcome strong me
 'He will not be able to overcome the strong me.' Bošković 2009: 189, (5)

(258) a. Vistinski-ot toj nikogas ne ke se pojavi. [Macedonian]
 real-the he never NEG will CL show.up
 'The real him will never show up.'

b. Go vidov vistinski-ot toj/*nego.
 CL saw real-the he/him
 'We saw the real him.' after Bošković 2009: 190, (6)

Bošković (2009) suggests that these data can be understood if one assumes a DP layer in languages with articles like Macedonian, but none in article-less languages like Russian. Case assignment to the pronoun is blocked in Macedonian because it is embedded in the DP-phase, assuming that D is a phase head. Alternatively, he suggests that Abney's (1987) AP analysis holds in DP languages, i.e. the modifying AP rather than the modified NP projects in contexts with adjectival modification, and that the adjective in examples like (258) acts as an intervener for case assignment. In either scenario, the pronoun is not accessible to an external case assigner and therefore ends up with default case.¹⁶

For Russian and other languages without articles, Bošković argues that they have no DP projection and that adjectival modifiers are NP-adjuncts, in line with the more classical analysis of adjectival modification. Therefore, neither DP nor AP intervene for case assignment to modified pronouns, accounting for the pattern in (257).

However, in spite of this similarity between Russian and Japanese their pronouns differ in several other respects, casting doubt on the hypothesis that Russian has N-pronouns of the type found in Japanese. Remember that personal pronouns in Japanese are described as

¹⁵This parallels the use of default pronominal forms in English expressions like *poor me*, with the only difference that non-subject case is the default case in English (Marantz 1991, McFadden 2004, Parrott 2009).

¹⁶I take it instead that *poor me*-type constructions involve either conversion of a pronoun to a noun, or a distinct root formed on the basis of the vocabulary item of the relevant pronoun. While I am not presenting a worked out alternative, a possibility would be that they involve insertion of functional vocabulary items in root nodes in the sense of De Belder (2011).

open-class, co-occur with possessives and demonstratives and cannot act as bound variables. Relevant examples are repeated here from (243).

- (243) a. anata-no kanozyo [Japanese]
 you-GEN she
 *‘your she’ (=girlfriend) Noguchi 1997: 777, (29b)
- b. ano kanozyo
 that she
 *‘that she’ Noguchi 1997: 777, (30b)
- c. *Dono zyosei_i-mo [kanozyo_i-ga tensai-da to] omotte-iru.
 every woman-also she-NOM genius-COP COMP think-PRS
 ‘Every woman_i thinks that she_i is a genius.’ Noguchi 1997: 771, (1b)

In contrast, Russian personal pronouns clearly form a closed-class paradigm and cannot be accompanied by possessors as in (259a) or demonstratives (259b). Bound variable readings are possible as shown in (259c).¹⁷

- (259) a. *moja ona/ moju jejo [Russian]
 my.F.SG.NOM she.NOM my.F.SG.ACC she.ACC
- b. *eta ona/ etu jejo
 this.F.SG.NOM she.NOM this.F.SG.ACC she.ACC
- c. Každyj student_i dumajet [čto on_i rabotajet sliškom malo].
 every student thinks.3SG that he.NOM work.3SG too little
 ‘Every student thinks that he works too little.’

To conclude, while Bošković’s (2009) data suggest that adjectival modification of personal pronouns is possible in languages like Russian and BCMS, I do not take this similarity with the behaviour of Japanese pronouns to be sufficient to conclude that Russian (and presumably other Slavic languages) have N-pronouns like Japanese. The differences observed above indicate that in spite of their similarity in terms of co-occurrence with adjectival modifiers, Japanese and Russian pronouns should be clearly distinguished from each other. Consequently, data of this sort do not rule out a pronominal determiner analysis for Slavic languages without articles and I remain agnostic concerning the validity of the pronominal determiner analysis or a variant thereof for languages of this type.

¹⁷Notice that the availability of variable binding may be related to the fact that Russian is not a consistent null subject language. The other properties hold independently, however.

4.3 Summary

This chapter dealt with languages where the complementary distribution of definite articles and APCs predicted by the pronominal determiner analysis does not hold. APCs with definite articles (dAPCs) were argued to reflect an additional point of variation involving the structural dissociation of nominal person features from D and their placement in a higher position in the xnP .

The analysis of APCs in article-less languages depends on the wider debate about the status of DP in these languages, although many of them that have pronominal APCs and postpositions may lack pronominal determiners on independent grounds (cf. chapter 3). For the remaining languages, I suggest that nominal person is encoded on a head in the xnP , although that head may not necessarily be D. The following chapter turns to person-number restrictions in APCs and discusses the possibility of accounting for them with the pronominal determiner analysis.

Chapter 5

Restrictions on person and number in APCs

This chapter addresses the restrictions observed for person and number in chapter 2. Section 5.1 discusses to what extent the pronominal determiner analysis can contribute to an account of the lack of third person APCs in a number of languages. Section 5.2 investigates a tentative correlation between the availability of third person APCs and the presence of definite articles in APCs. Finally, section 5.3 comments on the number restrictions on APCs.

5.1 The lack of third person APCs

This section addresses the distribution of person restrictions presented in chapter 2 section 2.6.1. The generalisation proposed for the surveyed data is repeated in (260).

(260) *Generalisation on person in APCs:*

If a language has third person APCs, it has first and second person APCs.

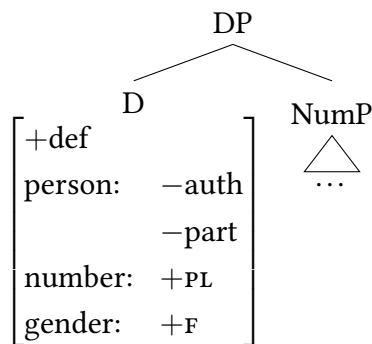
The pronominal determiner analysis (see chapter 1) suggests at least a partial answer to the question why third person APCs are crosslinguistically rarer than APCs with other persons. In languages where definite articles and adnominal pronouns realise the same syntactic position, third person pronouns and definite articles are essentially allomorphs (Postal 1969: 217; Lyons 1999: 315; Roehrs 2005; Bernstein 2008b; cf. also Luján 2002 for the hypothesis that determiners are “modified pronouns”). Consequently, the availability of definite articles is predicted to restrict the appearance of third person APCs.

I suggest implementing this intuition by analysing third person pronouns as allomorphs of the definite article which are inserted when no other phonological material is present in the same spell-out domain. I assume here that this is the DP, but see (289)-(291) below

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for Embick’s (2010) definition of spell-out domains. Consider the structure in (261) and the English VIs in (261) along with the examples in (263). If NumP contains no overt material, D is effectively placed at the right edge of the spell-out domain, i.e. there is no phonological material adjacent to D in the same phonological domain. In this case, the VI with the matching contextual condition wins, leading to insertion of *they*. If any material is spelled out overtly in NumP, D is spelled out by the default *the* instead.

(261)



(262) D[-part,+PL] ↔ *they* /]_ϕ
D[-part] ↔ *the*

- (263) a. the linguists
b. *they linguists
c. *the
d. they

This analysis can be extended to account for the lack of third person APCs in other languages with definite articles.¹ And indeed, the majority of the languages discussed in section 2.6.1 as lacking third person APCs have definite articles. Those with pronominal determiners, listed in (264), are directly compatible with this line of reasoning.²

¹Of course, this raises further questions, most notably why there is a fairly consistent tendency for an allomorphic distinction between “transitive and intransitive” uses in the third person. That is, why do so few languages show a similar split for first or second person pronouns (but see my proposal for Basque in chapter 3 section 3.4.2)?

It is worth noting that the majority of these languages are European Indo-European languages and with the exception of the Semitic languages, Welsh (Celtic) and Lezgian all of them belong to what has been termed Standard Average European, see Haspelmath (2001). However, it is not clear if or why this distinction should be particularly prone to borrowing. While I am not aware of comparative studies of the relative frequencies of third person definite noun phrases and APCs, it seems plausible that full/lexical third person xNPs are more frequent than first or second person APCs. While this does not force third person pronouns to be sensitive to whether or not they are followed by overt material, the higher frequency of third person xNPs may contribute to diachronic stability. An allomorphic distinction may be more likely to survive in third person contexts because language acquirers are more likely to pick it up thanks to the larger amount of relevant data.

²There is a caveat for Italian. While third person APCs are generally not available in out-of-the-blue contexts, strongly contrasting contexts such as (ia) appear to license adnominal uses of a third person pronoun. Initial

- (264) Dutch
 English
 German
 Standard Italian
 Northern Calabrian
 Southern Calabrian
 Hungarian
 Welsh

An apparent problem for German is addressed in section 5.1.1. As discussed in chapter 3 section 3.1, it is not presently clear whether Hungarian has pronominal determiners. If it does, the approach presented above predicts the observable lack of third person APCs in the language. Otherwise, their absence would require a different explanation.

The languages in (265) have definite articles and lack third person APCs, but adnominal pronouns and definiteness markers are not in complementary distribution, see chapter 4 section 4.1. Consequently, the above reasoning cannot directly explain the lack of third person APCs as briefly discussed in section 5.1.2.

- (265) Colloquial Cairene Egyptian Arabic
 Gulf Arabic
 Maltese
 Romanian
 Catalan
 Spanish
 Galician
 Bulgarian

responses from consultants suggest that for some reason this is not possible as easily with third person plural pronouns, cf. (ib).

- (i) a. Io professore non posso chiedere a lui studente di fare [Italian]
 I professor NEG can.1SG ask to him student to do
 il mio lavoro gratis.
 DET my work free
 ‘I professor cannot ask him student to do my job for free.’

adapted from Longobardi 2008: 200, fn. 10

- b. *Noi lavoriamo tanto, invece loro studenti sono pigri.
 we work.1PL much but they students are.3PL lazy

The question of how such constructions compare to regular APCs merits future attention. Pending further research, these data complicate, but do not necessarily contradict the proposal made in this section. A possible amendment to the current proposal would be that at least in Italian the definite article is not simply the adnominal form of the third person pronoun, but also lacks some feature present on the pronoun.

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The languages in (266) do not have third person APCs either, but additionally lack definite articles. As I will discuss in section 5.1.3, this raises questions about the applicability of the pronominal determiner analysis in the explanation of this gap.

- (266) Finnish
Russian
Polish
Lezgian

Before turning to these three groups of languages, the reader is reminded of an earlier observation supporting the present approach of identifying third person pronouns and determiners. As discussed in chapter 2 section 2.4.1, a number of languages with third person APCs actually use the third person pronoun as a type of article or definiteness marker. This has been observed in a range of Australian languages (cf. Louagie & Verstraete 2015 for a wide overview), but another striking case in point is the Creole language Ndyuka. Its third person pronoun *a* and its plural form *den* are identical to what is described as definite articles in the language, as illustrated by the glossing in (267), repeated from (101) in chapter 2.

- (267) A teke a ondoo kulo ne a gi Gazon.
3SG take the.SG hundred guilders CONJ 3SG give Gazon
'He took the hundred guilders and gave it to Gazon.'

after Huttar & Huttar 1994: 165, (738)

The singular form *a* appears as independent pronoun as subject of *teke* 'take' and direct object of *gi* 'give'. The same word also shows up as determiner of the direct object of *teke* 'take', *a ondoo kulo* 'the hundred guilders'. In the perspective advocated here, Ndyuka makes no allomorphic distinction between definite articles and third person pronouns and therefore contains the most straightforward sort of pronominal determiners.

5.1.1 German *d*-pronouns

German seems to be a solid example of a language with pronominal determiners (cf. in particular Lawrenz 1993, Rauh 2003, 2004, Roehrs 2005; see also Höhn 2016 and chapter 1 section 1.2.3.1 for general discussion). However, the question of whether third person APCs are ruled out or correspond to the definite article, as suggested for English above, raises questions concerning the so-called *d*-pronouns (Elbourne 2005: 47 acknowledges Uli Sauerland (p.c.) for this observation).

In addition to the 'simple' third person pronouns (*sie* 'she', *er* 'he', *es* 'it', plural *sie* 'they'), German has another set of so-called *d*-pronouns, singular *die*, *der*, *das*, plural *die*. With the

exception of the genitive and the dative plural, the latter are formally identical to the definite article (see Helbig & Buscha 2001: 229, Wiltschko 1998 and below for discussion), but they can be used without overt complements just like personal pronouns, see (268).³

- (268) Der/ er hat keine Ahnung. [German]
 DEM.SG.M he has.3SG no clue
 ‘That guy/he has no clue.’

If *d*-pronouns are identical to the definite article, the possibility for such intransitive uses poses a problem for the hypothesis that there is an allomorphic relationship between definite articles and personal pronouns, since the crucial allomorphy trigger was taken to be the lack of overt material following the personal pronoun. It is due to this consideration that Elbourne (2005: 47) rejects the hypothesis that the definite article is a special form of the third person pronoun, and instead assumes that they are “distinct lexical items.”

This problem does not arise as such on the view that phonological exponents are inserted after spell-out and may be featurally underspecified (chapter 1 section 1.1). Before turning to the details of my proposal, I address an alternative, lexicalist approach to *d*-pronouns by Wiltschko (1998) and explain why I cannot adopt it here.

Wiltschko (1998) proposes that personal and *d*-pronouns differ in their syntactic structure. She argues that definite articles in German consist of a bound morpheme *d*-, merged in the head of DP, and an agreement head AgrD that encodes ϕ -features and is realised by agreement endings.⁴ *D*-pronouns are essentially definite articles with an empty NP complement as sketched in (269a). Personal pronouns, on the other hand, are taken to consist of a single AgrD head as shown in (269b).

- (269) a. The structure of DPs: [DP d-[AgrD er [NP Mann/∅]]]
 b. The structure of personal pronouns: [AgrD er] Wiltschko 1998: 149, (10)

On this view, the deviance of third person APCs (**er Idiot* ‘he idiot’) results from the fact that personal pronouns cannot take a nominal complement. Wiltschko proposes the licensing conditions in (270) to control the distribution of NPs. The identificational licensing condition in (270b) prevents reduced forms of the definite article from occurring as intransitive *d*-pronouns. On this basis, Wiltschko argues that the English definite article cannot appear on its own as a pronominal or relative pronoun due to its lack of agreement morphology, in contrast to her proposal for German. For present purposes, my central concern is the formal

³In line with the analysis adopted below, I gloss *d*-pronouns as demonstratives, but will refer to them as *d*-pronouns throughout.

⁴See also Déchaine & Wiltschko (2002) for a variant of this approach extended to a variety of languages. I focus on Wiltschko (1998) here, since it deals with German specifically and makes clearer predictions regarding the absence of third person APCs.

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licensing condition in (270a) which bars the adnominal appearance of third person pronouns, precisely because they lack a D head by hypothesis and therefore cannot license any NP (overt or covert), see (269b).

(270) a. Formal licensing for NP: NP is licensed iff there is a D^0 .

Wiltschko 1998: 157, (23)

b. Identificational licensing for empty NPs: Strong AgrD licenses an empty NP

Wiltschko 1998: 160, (26)

While this proposal offers a thought-provoking perspective on the lack of third person APCs, it is incompatible with the basic framework assumed here, see chapter 1.1. Following Panagiotidis (2015), functional heads can only appear in the extended projection of a lexical head, never on their own. Consequently, the representation of personal pronouns in (269b) is not well-formed. Furthermore, (270b) cannot be stated as a syntactic condition in the DM framework assumed here, since “empty NP” is a purely phonological statement and syntax does not have access to phonological information, which is only supplied after spell-out.

So Wiltschko’s (1998) analysis of personal pronouns is untenable in the present framework. I take this to be more than just a quirk of the present set of assumptions, but an inevitable result if one takes extended projection to play a role in grammar. Below, I point out one empirical and one analytical issue with Wiltschko’s (1998) treatment of *d*-pronouns and argue that definite articles are in complementary distribution with personal pronouns in German after all, *pace* Wiltschko (1998) and Elbourne (2005: 47).

I refrain from a detailed appraisal of Wiltschko’s (1998) empirical arguments, but simply show that one of her arguments for assuming that *d*-pronouns contain an empty noun while personal pronouns do not is empirically wrong. She claims that while *d*-pronouns require a linguistic antecedent, i.e. an actual occurrence of the word the *d*-pronoun is referring to, personal pronouns only require a discourse antecedent and ascribes this difference to the proposed structural difference, namely that *d*-pronouns contain an elided noun while pronouns do not.

However, the presence of a linguistic antecedent is not in fact a requirement for the use of *d*-pronouns. This is illustrated in (271) where a *d*-pronoun can be used without any previous occurrence of the term *Bücherschrank* ‘book case’.⁵

⁵My native intuition is that the *d*-pronoun is slightly more appropriate than the personal pronoun in this case. This may be related to the fact that *d*-pronouns are actually demonstratives, see below. In the absence of previous discourse the masculine personal pronoun may be biased towards an animate interpretation, which is not the case for the demonstrative.

(271) (*watching someone trying to move a book case full of books*):

Wenn du die Bücher nicht rausnimmst, kriegst du {ihn/ den}
 if you the books not take.out.2SG get.2SG you.SG 3.SG.M.ACC DEM.M.SG.ACC
 nie von der Stelle.
 never from the place

‘If you won’t take the books out, you’ll never be able to move it {PPro/DPro}.’

adopted from Bosch & Umbach 2007: 47, (4); gloss added

Wiltschko (1998: 163f.) suggests that the difference in anaphoric behaviour between personal and *d*-pronouns can be shown using nouns with a mismatch between grammatical and semantic gender. The German noun *Mädchen* ‘girl’ is a notorious example of a neuter gender noun with semantically female reference and a referent introduced as *ein Mädchen* ‘a girl’ can be anaphorically referred to by both the neuter and the female personal pronoun, *es* and *sie* respectively. Wiltschko suggests that because *d*-words contain “an elliptical NP which needs a linguistic antecedent (i.e., a preceding NP), we expect that a *d*-word that is anaphorically related to the DP *ein Mädchen* can occur only in its neuter form” (Wiltschko 1998: 164). To support this, she provides the example in (272).⁶

(272) Ein Mädchen_i kam zur Tür herein. **Das**_i/ ***die**_i war schön.
 a girl_i came to-the door here-in the.N_i/ the.F_i was beautiful

‘A girl came through the door. She was beautiful.’ after Wiltschko 1998: 164, (34)

This example is problematic in two respects. First, the most natural reading of *das* seems to be a presentational one (i.e. the second sentence is interpreted as *that was nice*), potentially confusing judgements. More importantly, even on the intended reading I cannot replicate the reported grammaticality judgements, i.e. neither myself nor other German speakers I consulted informally found *die* to be markedly worse (in fact, some consultants reported the opposite). For clarification, consider the example in (273), which avoids the first issue and provides more context to make the anaphoric use of the *d*-pronoun more natural (see below for their *topic avoidance* property).

⁶Presentation slightly amended, original judgements retained.

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- (273) Julia_i hat sich gestern mit dem neu-en Mädchen_j aus
Julia has.3SG REFL yesterday with the.N.DAT.SG new-N.DAT.SG girl(N) from
der Klasse getroffen. Anscheinend ist **die**_{j/*i/} ?**das**_{j/*i} erst
the class met.3PL apparently is.3SG DEM.F.SG.NOM DEM.N.SG.NOM only
vor Kurzem aus Gütersloh nach Pasewalk gezogen.
before short from Gütersloh to Pasewalk moved
'Julia met with the new girl from her class yesterday. Apparently, she_{F/N} moved only
recently from Gütersloh to Pasewalk.'

Here, both the feminine and the neuter variant of the *d*-pronoun are acceptable, probably with a slight preference for the semantically appropriate feminine version. I conclude that there is no principled difference between *d*-pronouns and personal pronouns with respect to the choice between grammatical and semantic antecedent agreement. Hence, this argument for a structural difference between them is untenable. If *d*-pronouns indeed contain an empty noun, these data actually show that such configurations neither block semantic agreement nor necessitate the presence of a linguistic antecedent. This refutes a potential objection to assuming that third person personal pronouns are (part of) a full *xnP*, as assumed here. At the same time, it brings us back to the original problem, namely why third person APCs are ruled out in German (and similar languages). Recall that data like (268) appear to suggest that German definite articles can occur without an overt complement just like personal pronouns, which has been treated as an argument against treating them as allomorphs.

That objection depends on one crucial assumption, forming the basis of Wiltschko's (1998) analysis as well as Elbourne's (2005) reservation against the allomorphic treatment proposed here, namely that *d*-pronouns are instances of the definite article. This is not an innocent assumption and I believe it is wrong, since German *d*-pronouns have typically been classified as demonstratives (e.g. Bosch et al. 2007, 2003, Diessel 1999, Engel 1996, Helbig & Buscha 2001).

This manifests itself in contrasting behaviour between *d*-pronouns and personal pronouns, although in different contexts than those discussed above. In particular, *d*-words avoid discourse topics (Bosch & Umbach 2007) or are associated with topic shift (Diessel 1999: 96), while personal pronouns are preferentially used to refer to continuing topics.⁷ Example (274) illustrates this (for further examples and discussion see Bosch et al. 2007, 2003, Bosch & Umbach 2007, Diessel 1999, Himmelmann 1997; cf. Comrie 2000 for comparable Dutch data). Under the most natural reading, the first sentence establishes *Franziska* as topic. If the

⁷The preference of pronouns for continuing topics may be weaker than the topic avoidance of demonstratives, as seen in example (277) below. See also Bosch & Umbach (2007).

following sentence contains a pronoun, it has to refer to *Franziska*. If a *d*-pronoun is used, the topic shifts, meaning that Jessica was the one who won.

- (274) Gestern hatte Franziska_i Gelegenheit mit Jessica_j eine Partie Schach zu
 yesterday had.3SG Franziska opportunity with Jessica a game chess to
 spielen. Am Ende gewann sie_{i/*j}/ die_{j/*i} das Spiel.
 play in.the end won.3SG she DEM.NOM.SG.F the game
 ‘Yesterday, Franziska had the chance to play a game of chess with Jessica. In the end,
 she/the latter won the game.’

This is probably a matter of tracking information structure rather than linear precedence or grammatical role, although they naturally interact (Bosch & Umbach 2007). Consider the contrasting example in (275). Here, the context sets up Jessica as the discourse topic, and she is pronominalised for maximal topicality in (275b), while the subject *Franziska* carries new information focus. In this case, the *d*-pronoun refers to Franziska, although she is the subject of the preceding sentence and linearly more distant than *ihr* (referring to Jessica). A personal pronoun in this position would preferentially refer to Jessica as a continuing topic.⁸

- (275) a. Jessica is an enthusiastic chess player and is always looking for worthy opponents.
 b. Gestern hatte FRANZISKA_i Gelegenheit mit ihr_j eine Partie (Schach)
 yesterday had.3SG Franziska opportunity with her a game chess
 zu spielen. Am Ende gewann sie_{j/?i}/ die_{i/*j} das Spiel.
 to play in.the end won.3SG she DEM.NOM.SG.F the game
 ‘Yesterday, Franziska had the chance to play a game of chess with her. In the end,
 she/the former won the game.’

These considerations allow us to re-evaluate claims in the literature that *d*-words cannot be A-bound (Patel-Grosz & Grosz 2010, Wiltschko 1998). In (276), *der* cannot be coindexed with the main clause subject *Peter*. The *d*-word seems to behave like an R-expression by rejecting binding (cf. *Peter* in **He_i believed that Peter_i is stupid*), suggesting that it is subject to Principle C of binding theory.

- (276) Peter_i hat geglaubt, daß er_i/ *der_i dumm ist.
 Peter_i has believed that he_i/ d-pron_i stupid is.
 ‘Peter_i has [sic!] believed that he_i is stupid.’ Wiltschko 1998: 165, (38)

Given the discussion above, another explanation is possible. If *d*-pronouns are indeed demonstratives and subject to topic avoidance, the deviance of *der* in (276) is expected. The

⁸The effect should hold without pronominalisation of Jessica, but repetition of the proper name would sound unnatural. For the same reason, a second occurrence of *Schach* ‘chess’ is dispreferred.

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subject *Peter* forms the default topic of the clause, and since *d*-words avoid reference to topics, *der* cannot be coindexed with *Peter*. This does not mean, however, that *d*-words cannot be A-bound at all. Consider the examples in (277).

- (277) a. Mirko_i hat ihm^{*j/k} zugeflüstert, dass Marko_j beim nächsten Spiel
 Mirko has.3SG him to.whispered that Marko in.the next game
 gewinnt.
 wins.3SG
 ‘Mirko_i whispered to him^{*j/k} that Marko_j would win the next game.’
- b. Mirko_i hat Marko_j zugeflüstert, dass er_{i/j}/ der^{*i/j} beim nächsten
 Mirko has.3SG Marko to.whispered that he DEM.NOM.SG.M in.the next
 Spiel gewinnt.
 game wins.3SG
 ‘Mirko_i whispered to Marko_j that he_{i/j} would win the next game.’

Here, the main clause contains two possible binders. In (277a), I show that Principle C applies also if the illicit binder of the subordinate subject is the indirect object of the main clause: *ihm* and *Marko* must not be coreferent. In (277b), coreference between the main clause subject and the *d*-pronoun is ruled out for the same reason as in (276). Importantly, however, the indirect object *Marko* can bind the *d*-pronoun, so there is no general principle preventing *d*-pronouns from being A-bound.

Similar considerations are probably at play in example (278a), which supposedly shows that *d*-pronouns cannot be quantifier-bound. Again, when the binder is not the main clause subject as in (278b), quantifier-binding becomes possible. For further discussion of binding of *d*-pronouns see Hinterwimmer (to appear).

- (278) a. Jeder Mann_i glaubt, daß er_i/ *der_i stark ist.
 every man_i believes that he_i/ *d-word_i strong is
 ‘Every man_i believes that he_i is strong.’ after Wiltschko 1998: 166, (40)
- b. Maria_i sagt zu [jeder Frau, die sie_i trifft]_j, dass sie_{i/(#)j}/
 Maria says to every.DAT.F woman that she meets.3SG that she
 die^{*i/j} bald mit dem Rauchen aufhören wird.
 DEM.F.SG.NOM soon with the smoking stop will.3SG
 ‘Maria_i says to every friend_j that she_{i/j} will soon stop smoking.’

I conclude, *pace* Wiltschko (1998: 166),⁹ that *d*-pronouns can in principle be bound by quantifiers. One could claim that, consequently, they also lack any – even silent – nominal complement, just like pronouns. This seems to go the wrong way, since it keeps the problematic concept of dangling functional heads that do not form part of an extended projection without delivering in exchange an explanation for the differences between personal and *d*-pronouns.

While I do not have an account of how the insights of binding theory relate to the internal structure of nominal (including pronominal) arguments, I take the above data to show that simply containing a nominal core does not predict how a category behaves with regard to binding or discourse reference after all. So rather than assuming that *d*-pronouns are like pronouns I propose the opposite, namely that personal pronouns, too, are *xnPs* projected by the categoriser *n*.¹⁰ The differences observed above may be best analysed as resulting from differences in feature specifications of the higher, reference-related heads in the *xnP*, in the case of German particularly the D head. Following the above mentioned classification of *d*-words as demonstratives, I surmise that a [+dem(onstrative)] feature plays an important role in this respect.

This brings me back to the main issue of this section, the problem caused for the pronominal determiner analysis by apparent intransitive uses of the definite article, discussed above for (268). The gist of my answer is that *d*-pronouns are demonstratives and not identical to the definite article, which in turn is indeed in an allomorphic relationship with third person pronouns. The large amount of syncretism between the *d*-words and definite articles is the result of underspecification of VIs. This is illustrated by the example list of VIs in (279) which compete for insertion into a D head specified as definite plural and nominative.¹¹ An abstract tree fragment is presented in (280) for expository purposes.

- (279) D[case: NOM, +def, -dem, +pl] ↔ *sie* / ___]_ϕ
 D[case: NOM, +def, +pl] ↔ *die*

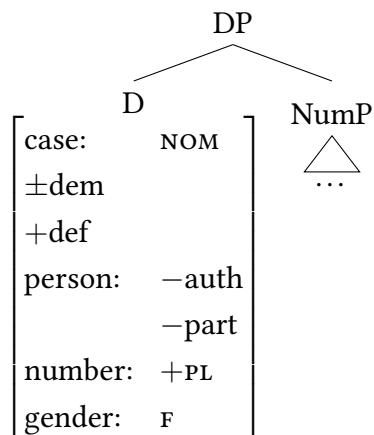
⁹Patel-Grosz & Grosz (2010: 347) restrict their similar claim to quantifiers in subject position. These may indeed not be licit binders for *d*-pronouns, albeit for independent reasons if the argument developed here is on the right track.

¹⁰Discussing asymmetries in the use of formal vs. semantic agreement, Wurmbrand (to appear) proposes that *d*-words may involve ellipsis of a noun phrase with a linguistic antecedent (formal agreement) or an abstract null noun (semantic agreement). The facts discussed there may require an elaboration of the current account, but the crucial point in what follows, the phonological emptiness of the complement domain of D, is given in any case.

¹¹For ease of exposition, I refrain from deconstructing case, gender and number features unless they are directly relevant to the argument. A full representation would take account of these features to capture further syncretisms in the paradigm, e.g. between nominative and accusative plural, cf. Bierwisch (1967).

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(280)



As gender is irrelevant throughout the plural paradigm, I assume that plural VIs are not specified for gender and hence strongly syncretic. It may also be noticed that the VIs in (279) are underspecified for person. In the first instance, this is a matter of economy for the third person pronouns, treating them as the default for spell-out, even though I assume that third person is syntactically represented (see chapter 1). The VI *die* as defined in (279a) is underspecified for $[\pm\text{dem}]$ and therefore inserted independently of whether the target node is $[\text{+dem}]$ or $[\text{-dem}]$ in a nominative plural context. This accounts for the syncretism of the *d*-pronoun *die* and the definite article in most contexts, see also the glossing in (281).¹² The personal pronoun *sie*, on the other hand, requires there to be no phonological material following it in its spell-out domain. Under the assumption that DP represents the relevant spell-out domain, this captures the cases illustrated in (281ab), where the personal pronoun cannot precede a common noun or adjective. The data are less clear for examples involving other adjuncts, like PPs (281c) or adverbials (281d). While I as well as other speakers I have consulted take the third person pronoun to be marginal in these contexts as well, Engel (1996: 656) provides examples of this sort: *er da unten* ‘he down there’ and *sie im hellblauen Mantel* ‘she in the light blue coat’.¹³ The discussion below suggests that the central question may be whether a $[\text{+dem}]$ feature is required in configurations of this sort.

¹²The demonstrative is typically taken to be distinguished from the definite article by being obligatorily stressed, cf. e.g. Engel (1996: 535, 660).

¹³The collocation *er hier* ‘he here/this guy here’, available in informal registers, raises the same question.

- (281) a. (*sie/ die) Student-en
 they.NOM the/DEM.NOM.PL student-PL
 ‘(*they/the) students’
- b. (*sie/ die) Grün-en
 they.NOM the/DEM.NOM.PL green-PL
 ‘(*they/the) green (ones)’
- c. (??sie/ die) mit der Mütze
 they.NOM DEM.NOM.PL with the hat
 ‘(*they/those) with the hat’
- d. (??sie/ die) da unten
 they.NOM DEM.NOM.PL there below
 ‘(*they/those) down there’

It should be stressed that even to the extent that these structures are grammatical in the grammar of some speakers, they do not represent counterexamples to the proposed complementary distribution of definite articles and personal pronouns. The *d*-word in these examples is a demonstrative not a definite article. This becomes clear in cases where there they are not syncretic. As mentioned in passing before, the form of the pronominal *d*-words is not identical to that of the definite article (or the formally identical adnominal demonstrative) in the genitive singular and plural and the dative plural, see (282).

(282)

	Definite article			<i>d</i> -words		
	fem	masc	neut	fem	masc	neut
GEN.SG	der	des		deren/derer	dessen	
GEN.PL		der		deren/derer		
DAT.PL		den		denen		

This is illustrated for the dative plural in (283). The *d*-pronoun form *denen* is ruled out if followed by a full noun (283a) or an adjective (283b), so in these contexts the definite article and the adnominal demonstrative are syncretic. With a PP (283c) or adverbial modifier (283d), on the other hand, the *d*-word *denen* is required.¹⁴

¹⁴The versions with *den* in (283cd) are grammatical strings, but only in the accusative masculine singular meaning ‘the one with the hat’ or ‘the one down there’ respectively.

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- (283) a. (**denen*/ *den*) Student-en
 DEM.DAT.PL the/DEM.DAT.PL student-DAT.PL
 ‘to (these/the) students’
- b. (**denen*/ *den*) Grün-en
 DEM.DAT.PL the/DEM.DAT.PL green-DAT.PL
 ‘to (these/the) green (ones)’
- c. (*denen*/ **den*) mit der Mütze
 DEM.DAT.PL the.DAT.PL with the hat
 ‘to (*those/the ones) with the hat’
- d. (*denen*/ **den*) da unten
 DEM.DAT.PL the.DAT.PL there below
 ‘to (those/*the ones) down there’

Descriptively, the use of *denen* in (283cd) over the syncretic form shared between the definite article and demonstrative used in (283ab) appears to be triggered by the absence of overt nouns or adjectives. In a lexicalist theory of grammar, one might treat *denen* as an intransitive determiner, while the article and adnominal demonstrative *den* would be transitive, requiring a nominal complement. Apart from obscuring the obvious syncretism observed throughout most of the paradigm, such an analysis would also have to reject the hypothesis that each extended projection has a lexical category at its core and is therefore incompatible with the framework adopted here, see chapter 1.¹⁵ Below, I sketch an alternative analysis.

The article and demonstrative are syncretic when followed by a noun or adjective (283ab), so I take the syncretic exponent *den* to represent the elsewhere VI for dative plural definite D. The data in (283cd) suggest that there are distinct vocabulary items for the definite article and the demonstrative in the dative plural (the same holds for genitive singular and plural as mentioned above). I propose that the special *d*-form occurs at the edge of a spell-out domain, essentially parallel to the description of third person pronouns earlier. This leads to the following VIs to account for the distribution of dative pronouns, *d*-words and adnominal demonstratives/articles:

- (284) D[case: NOM, +DEF, -dem, +pl] ↔ *ihnen* / ___]_ϕ
 D[case: DAT, +DEF, +dem, +pl] ↔ *denen* / ___]_ϕ
 D[case: DAT, +DEF, +pl] ↔ *den*

¹⁵It is also not clear how the data discussed in (286) below would be dealt with under a lexicalist approach.

Crucially, this relies on the assumption that (non-adjectival) modifiers are outside the relevant spell-out domain – otherwise, the default *den* VI should be inserted in (283cd). At first pass, there seem to be two ways to achieve this. Either non-adjectival modifiers are merged higher than DP, which seems unlikely given common assumptions about nominal structure,¹⁶ or they merge late, i.e. they only enter the structure after the ‘core structure’ containing the *xnP* spine including any adjectival modifiers has been sent to spell-out. This latter option may be connected to the idea of late merger of adjuncts, which is argued to account for anti-reconstruction effects (see e.g. Fox 2002, Lebeaux 2000).

If there is a correlate of late merge for vocabulary insertion to the effect that PP and adverbial modifiers, but crucially not adjectival modifiers, are subject to late merge, we are one step closer to explaining the distribution of the special *d*-forms. Assuming these modifiers are not present upon evaluation of the VIs in (283), there is no material other than D in the spell-out domain of D in examples like (283cd) and *denen* is inserted.¹⁷

This cannot be the full story, however, since the special *d*-forms also occur in contexts which are not expected to involve late merge. Data like (285a) have been discussed in the literature on the distribution of *one* in English (e.g. Jackendoff 1977: 58-60, Panagiotidis 2002: 86-93, Panagiotidis 2003b, Harley 2005) to show that complements of nouns, here *Physics* and *Chemistry*, cannot be stranded in *one*-replacement, suggesting that they are inside the domain that this process applies to. In this respect, complements contrast with adjuncts like *from Essex* and *from Cambridge* in (285b), which are outside the scope of *one*-replacement.

(285) a. *The students of Physics are taller than the ones of Chemistry.

Panagiotidis 2002: 86, (1)

b. The students from Essex are taller than the ones from Cambridge.

Interestingly, complements can be stranded without problems in the German counterpart of (285a), provided in (286a). Descriptively, this seems to indicate that we are dealing with a demonstrative *die* and not an ‘intransitive’ definite article. This hypothesis is supported by the fact that in a dative plural context like (286b) the special *d*-form has to be used rather than the syncretic form identical to the definite article.¹⁸

¹⁶But cf. data like *the boy and the girl with the same birthday* (Jackendoff 1977: 191, (7.55)) where the PP seems to be merged outside the conjoined DPs. Surprisingly, Jackendoff (1977: 192, (7.58)) observes similar data for nominal complements, e.g. *three students and two teachers of the same language*. While this may provide an avenue to a unified analysis of the data in (283) and (286), Jackendoff (1977: 193f.) proposes that these data are indicative of problems with coordination as a structural diagnostic. I do not pursue this here, but see Link (1984) for discussion of the semantics of similar *hydra* structures.

¹⁷This approach would, on the other hand, predict that these modifiers should indeed be available with personal pronouns, i.e. (281cd) should be grammatical with the personal pronoun, unless they are ruled out for independent reasons. One such reason might be the [\pm dem] specification of the vocabulary items.

¹⁸Strangely, parallel APC examples are somewhat degraded by comparison, see (i).

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(286) a. Die Studenten der Physik sind größer als die
 the.NOM.PL students the.GEN.SG physics are.3PL taller than DEM.NOM.PL
 der Chemie.
 the.GEN.PL chemistry

‘The students of physics are taller than those of chemistry.’

b. Die Studenten der Physik vertrauen (denen/
 the.NOM.PL students the.GEN.SG physics trust.3PL DEM.DAT.PL
 *den) der Chemie.
 the/DEM.DAT.PL the.GEN.SG chemistry

‘The students of physics trust those of chemistry.’

Recall that *den* is a viable demonstrative in adnominal contexts like (283 ab) above, so the question is what rules out its appearance here. A possible explanation on the basis of the vocabulary items proposed in (284) is that the genitive complements are outside the spell-out domain of D. Assuming that the relevant D node must be [+dem], possibly because [-dem] is incompatible with contrastive contexts, the VI *denen* wins over the elsewhere form *den*.

The above discussion suggests that the split between elements that do or do not trigger the use of the special *d*-form does not follow the distinction between adjuncts and complements. Instead, the illustration in (287) seems a reasonable approximation. Descriptively, everything to the right of the (overt or covert) noun does not block the use of the special *d*-form, which is only sensitive to material inside the spell-out domain marked here as ϕ .

(287) [den fleißigen Studenten] ϕ der Physik/ aus Bielefeld/ da
 DEM/the.DAT.PL diligent students the.GEN.SG physics from Bielefeld there
 hinten
 behind

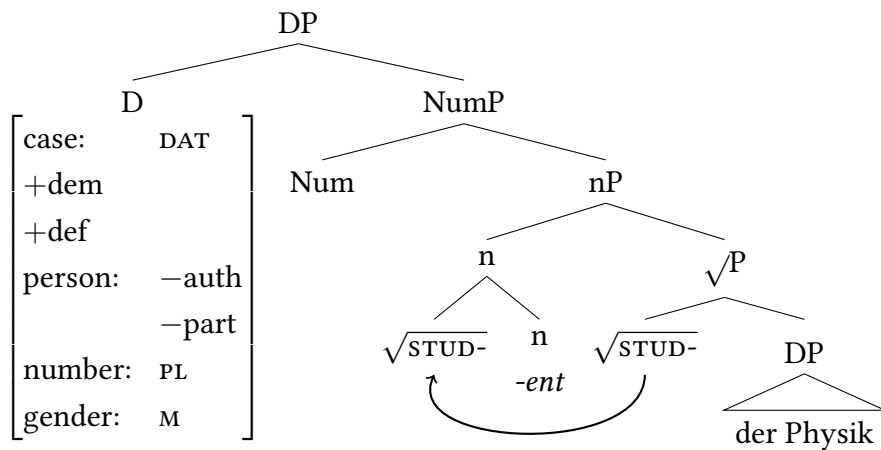
‘the diligent students of Physics/ from Bielefeld/ back there’

Importantly, this does not mean that nominal complements and adjuncts form a distributional class. Instead, I propose that they are outside the spell-out domain of D for different reasons. While the late merger approach sketched above accounts for the behaviour of adjuncts, I suggest that complements are outside D’s spell-out domain because they are spelled out too early. Consider the structure in (288). Following common practice in DM, I take the

(i) ??Wir Studenten der Physik sind größer als ihr der Chemie.
 we students the.GEN.SG physics are.1PL taller than you.PL the.GEN.SG chemistry
 ‘We students of physics are taller than you (ones) of chemistry.’

internal argument of the nominal to be located inside nP. For concreteness, I take it to be a sister of the root (following the notation employed, e.g., by Harley 2007 and Embick 2010).¹⁹ I furthermore assume that at least in German roots systematically move to a categorising head, possibly due to the affixal nature of n.²⁰ See Harley 2007 for the analysis of *student* as $\sqrt{\text{STUD-+ent}}$, although the general point would hold even if the correct analysis involved the root $\sqrt{\text{STUDENT}}$ and a phonologically null nominaliser.

(288)



I adopt Embick's (2010) theory for the cyclic spell-out of (morpho-)syntactic structure, which suggests linear and structural restrictions for the triggering of contextual allomorphy. The linear component requires adjacency between the node that triggers allomorphy and the one that displays allomorphic behaviour. Moreover, both nodes need to be present in the same spell-out domain, which is defined structurally in terms of cyclic spell-out as outlined in the assumptions in (289)-(291).²¹

(289) When cyclic head x is merged, cyclic domains in the complement of x are spelled out. Embick 2010: 51, (SO1)

(290) Merge of cyclic y triggers Spell-Out of cyclic domains in the complement of y , by [289]. For a cyclic domain headed by cyclic x in the complement of y , this means that the complement of x , the head x itself, and any edge⁺ material attached to x 's domain undergoes Vocabulary Insertion. Embick 2010: 53, (SO2)

¹⁹Alternatively, it may be introduced by a distinct head inside nP. Distinguishing between these options is secondary for present purposes.

²⁰English may not have generalised movement of roots to categorial heads if the fact that certain external derivational affixes are not selective for specific roots is to be explained along the lines of Embick & Marantz (2008) and Embick (2010), see particularly Embick (2010: 57f.).

²¹The edge⁺ material referenced in (290) refers to all non-cyclic nodes between the cyclic node x being spelled out and the node y triggering its spell-out.

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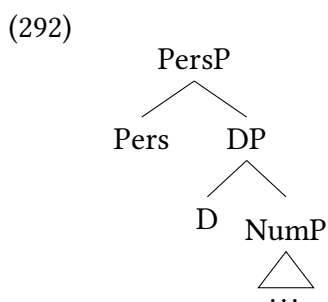
(291) Material in the complement of a phase head that has been spelled out is not active in subsequent PF cycles. That is, the complement of a cyclic head x is not present in the PF cycle in which the next higher cyclic head y is spelled out. Embick 2010: 54, (SO3)

The crucial assumption for the present issue is (291). If D and n are cyclic heads, then the DP *der Physik* is not active in the spell-out cycle where the higher D is spelled out. Therefore, if the noun undergoes ellipsis in (288), there is no overt material left in the spell-out domain of D in the structure. Consequently, the contextual requirement for the insertion of *denen* in (284) is fulfilled.

To summarise this section by returning to the initial problem, I have argued that the existence of *d*-pronouns in German does not pose an insurmountable challenge to a unified analysis of third person pronouns and determiners and have outlined how certain problems can be addressed.

5.1.2 Languages with dAPCs

In chapter 4, I have proposed that (most) languages requiring the use of definite articles in APCs do not have pronominal determiners, but involve a structure like (292) with person features encoded separately from D. Since definite articles and adnominal pronouns are not in complementary distribution here, the definite article is not expected to represent the adnominal allomorph of third person pronouns. Third person APCs are therefore expected to be possible.



The Greek varieties in the sample use demonstratives as third person pronouns, which can also occur adnominally, so that they descriptively have third person APCs. Of course, the significance of these demonstrative-based third person pronouns in APCs is unclear, see chapter 2 section 2.6.1.2. However, most other languages with dAPCs do not seem to allow third person APCs, namely the ones listed in (293).²² The languages in (293a) display the unagreement phenomenon discussed in more detail in chapter 6. On the other hand,

²²I have so far not been able to verify the behaviour of Aromanian in this respect, although I suspect it to belong to the class in (293a).

the languages in (292b) do not have unagreement, patterning with languages like standard Italian in this respect. The explanation remains elusive at the moment, but I provide some speculation below.

- (293) a. Catalan
Spanish
Galician
Bulgarian
- b. Colloquial Cairene Egyptian Arabic
Gulf Arabic
Maltese

In chapter 6 section 6.4, I consider the possibility that the lack of unagreement in the languages in (293b) might suggest that they have pronominal determiners after all. In this case, the lack of third person APCs would parallel that for other languages with pronominal determiners.

The lack of third person APCs in the languages in (293a) may be explainable if dAPCs in those languages are associated with demonstrative features, as proposed in chapter 6. This would suggest that adnominal demonstratives take the place of third person APCs in these languages, while the Pers head in a non-demonstrative structure would receive null spell-out, making it indistinguishable from a plain definite DP.²³ Such an account faces potential issues when it comes to explaining how third person pronouns avoid receiving obligatory null spell-out when they occur outside APCs. This might indicate that further features are involved in distinguishing whether Pers is realised as a demonstrative, a personal pronoun or by a null morpheme, but the specifics remain unclear at the moment.

5.1.3 Article-less languages

The languages in (294) display restrictions against third person APCs, but have no definite article.²⁴ This complicates the application of the pronominal determiner analysis as discussed in chapter 4 section 4.2, and consequently raises questions about the applicability of the above account for the lack of third person APCs in these languages. In this section, I discuss the general issues with a focus on Finnish and the Slavic languages. While I will have nothing to say about Lezgian in particular, some general points I raise may be relevant for it as well.

²³It seems worth pointing out again that Hualde (1992: 290) provides the Catalan example *ells els pagesos* ‘they the peasants’ with third person APC, although my consultants were unsure regarding the status of such third person APCs, as mentioned in chapter 2 footnote 49. If Catalan had third person APCs, it would avoid the problem above, but it is unclear if similar data could be found in other languages from (293a).

²⁴Likely, this applies to further Slavic languages without articles.

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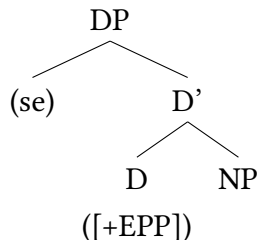
- (294) a. Finnish
 b. Russian
 Polish
 c. Lezgian

Turning to Finnish first, Asbury (2008: ch. 3) and more recently Gröndahl (2015a,b) have argued that it actually projects a DP in spite of the lack of an overt definite article. Gröndahl in particular notes that the neutral demonstrative *se* is developing into a definite article in the language, cf. for example (295).

- (295) Näin tytön. **Se** tyttö itki. [Finnish]
 see-IPFV-1SG girl-ACC it girl cry-IPFV-3SG
 ‘I saw a girl. That girl was crying.’ Sulkala & Karjalainen 1992: 269, (1308)

His analysis locates the emerging article in Spec,DP rather than the head position (296). While this precludes a pronominal determiner analysis of Finnish, it allows a synthesis with Asbury’s (2008) proposal that genitive and partitive are “D-cases” in Finnish, representing overt realisations of the D head as illustrated in (297).

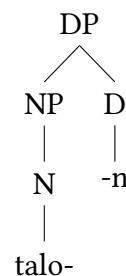
(296)



Gröndahl 2015a

- (297) a. Finnish genitive as a D-suffix
 talo-**n**
 house-GEN
 ‘the house’s’

b.



Asbury 2008: 92, (4-5)

These proposals are in line with the discussion in chapter 3 section 3.1 about the problems languages with prenominal APCs and postpositions raise for the pronominal determiner analysis. Against this background, the head-finality of Finnish also suggests that its prenominal

adnominal pronouns are better analysed as specifiers, in parallel to Gröndahl's analysis of *se* (and perhaps along the lines of Choi 2014b, albeit without his claim to generality). The lack of third person adnominal pronouns may be the result of competition between the determiner *se* (and its plural counterpart *ne*) and the third person personal pronouns *hän/he*, possibly due to similar contextual restrictions as suggested for English-type pronouns above.²⁵

Turning to the Slavic languages without articles, there are proposals in the literature that argue for the existence of DP at least in Serbocroatian/BCMS (Progovac 1998) and Polish (Rutkowski 2002, Willim 2000). However, they all suggest that pronouns are base-generated in N and that APCs should be analysed as appositions. It is not clear how the restrictions observed for person and number could be explained on such a view, see Pesetsky (1978) and the Russian and Polish examples in (298) and (299).

(298) a. Oni (*lingvisty) zanimajut-sja važnymi [Russian]
 they linguists concern.3PL-REFL important-INST.PL

voprosami.
 question-INST.PL

‘They (*linguists) concern themselves with important questions.’

b. Ty (*lingvist) zanimaješ-sja važn-ymi vopros-ami.
 you.SG linguist concern.2SG-REFL important-INST.PL question-INST.PL

‘You (*linguist) concern yourself with important questions.’

(299) a. Oni (*lingwiści) zajmują się ważnymi [Polish]
 they linguists concern.3PL REFL important-INST.PL

pytaniem.
 question-INST.PL

intended: ‘They (*linguists) concern themselves with important questions.’

b. Ty (*lingwista) zajmujesz się ważnymi pytaniami.
 you.SG linguist concern.2SG REFL important-INST.PL question-INST.PL

intended: ‘You (*linguist) concern yourself with important questions.’

As discussed in chapter 4 section 4.2, I assume that the adnominal pronoun in the Slavic languages without articles realises a functional head in the xnP , although it is possible that that head is not the D head found in languages like English (Bošković 2008 and subsequent work). Importantly, the explanation outlined in section 5.1 for the lack of third person APCs

²⁵Tommi Gröndahl (p.c.) suggests that the human property of the personal pronouns may play a role in its incompatibility with determiner status. How or why this would be the case remains an open question for now.

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for languages with pronominal determiners does not hinge on the category of the head hosting them. Its central aspect is, instead, that there are competing VIs corresponding to the definite article and third person pronouns, which differ in their contexts of application. From that perspective, third person adnominal pronouns are ungrammatical in these Slavic languages because the VIs for third person pronouns have a contextual requirement to be at the right edge of their spell-out domain. The elsewhere VI for the relevant node, be it D or some lower head, is phonologically null and inserted in a node specified as third person if it is not at the edge of its spell-out domain.²⁶

5.2 Third person-article generalisation

A basic assumption of the pronominal determiner analysis is that adnominal pronouns and definite articles are in complementary distribution. In section 5.1 I have proposed that the lack of third person APCs in several languages arises because definite articles are allomorphs of third person adnominal pronouns in these languages. This analysis is neutral with respect to the status of third person adnominal pronouns in languages without overt articles. Drawing on the data in chapter 2 section 2.4 and 2.6.1, Table 5.1 presents the number of languages with third person pronouns according to whether they have articles.²⁷ Clearly, the majority lacks articles in the first place, in line with the discussion in section 5.1.

Table 5.1: Number of languages with third person APCs according to availability of articles

	3≠Dem	All?	3=Dem	Total
no article	20	6	8	34
article	5	4	7	16

However, there is a remainder of 16 languages with articles and third person adnominal pronouns. The co-existence of both word classes suggests that they are not allomorphs in these languages. Assuming that APCs are prototypically definite and treating the pronominal determiner analysis as the null hypothesis, this naturally leads to the third person-article generalisation presented in (138) in chapter 2 section 2.6.1.2 repeated in (300).

²⁶If vocabulary insertion is optional, one could avoid positing this null VI and assume that insertion simply fails in these contexts, leading to non-spell-out for this node. I will not pursue such a model here, as it blurs the distinction between genuine null morphemes and missing VIs, which Panagiotidis (2015: 70-72) suggests limit the productivity of word formation.

²⁷I exclude Ndyuka from this count, as its definiteness markers are indistinguishable from third person adnominal pronouns, see section 5.1 and chapter 2 section 2.4.1. Consequently, it represents a special case of the pronominal determiner analysis rather than a deviation from it.

(300) *Third person-article generalisation:*

If a language has third person APCs and distinct definite articles, it has articles in APCs.

The languages listed in (301) all have articles in APCs, in line with this generalisation. Adopting the categories from chapter 2 section 2.6.1, this list distinguishes between languages which use demonstratives as third person pronouns (301a), languages with good evidence for APCs in all persons (301b) and those likely to have APCs of all persons (301c).

- (301) a. Languages with APCs of all persons, demonstratives as third person pronouns (3=Dem)
Standard Modern Greek
Calabrian Greek
- b. Languages with APCs of all persons (*all*)
Maori
Tuvaluan
Abkhaz
- c. Languages likely to have APCs of all persons (*all?*)
Mupun

As discussed in chapter 2 section 2.6.1.1, it is possible that the two Greek varieties in (301a) allow third person APCs simply because they use demonstratives in place of third person pronouns, and that whatever blocks third person APCs in most other Indo-European languages would otherwise apply here as well. This caveat does not threaten the generalisation in (300), of course, and no such issues arise in the remaining languages listed above.

However, a number of other languages seem more problematic for the Third person-article generalisation, since they allow third person APCs and have definite articles, but apparently do not use them in APCs. They are listed in (302) using the same three subclassifications as above.

- (302) Languages with third person APCs and definite articles, but no separate article in APC
- a. Languages with APCs of all persons, 3=Dem
Lavukaleve
Norwegian
Danish
Swedish
Icelandic

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- b. Languages with APCs of all persons (*all*)
 - Hausa
 - Nigerian Pidgin
- c. Languages likely to have APCs of all persons (*all?*)
 - Kwaio
 - Usan
 - Kamang

For the languages in (302a) where demonstratives act as third person pronouns, the same reservations noted above with respect to the Greek varieties mean that it is not clear if they are subject to the third-person article generalisation. Before providing a discussion of Lavukaleve in subsection 5.2.1 and of the Scandinavian languages in subsection 5.2.2, I briefly comment on the other problematic cases in (302bc).

In Hausa, the morpheme commonly identified as definite article is actually a “previous reference marker” (Newman 2000: 143), meaning that it is not normally used on first mention of a noun phrase (*ibid.*). This raises important questions about the proper syntactic analysis of this marker, which can also co-occur with demonstratives, but it also means that the language is exempt from the generalisation in (300). Indeed, APCs can appear with or without the “definite article” in Hausa, see chapter 2 section 2.4.2.2. Given Newman’s (2000) characterisation, the “article” should not normally appear in discourse-initial APCs. Further research needs to determine whether the distribution of this marker in APCs is compatible with these predictions.

In Nigerian Pidgin, the article has been described as optional and it is not clear what determines its distribution.²⁸ Moreover, while Faraclas (1996: 181) claims that “[a]ny pronoun” may be used in an APC, the only example of an APC provided is the second person plural, see (303).

- (303) Unà onyibo pipul no dè chu kola àtòl. [Nigerian Pidgin]
2PLEMPH white people NEG INCOMPL chew kola NEG.EMPH
‘You white people don’t chew kola nut at all.’ after Faraclas 1996: 181, (802)

Given the scarcity of data, it is not entirely clear if third person APCs are in fact allowed in the language. If they are not, Nigerian Pidgin may have pronominal determiners after all, which would make it irrelevant for the generalisation in (300). Alternatively, considering that the “optionality” of the definite article is not fully understood, it may be that whatever governs its distribution excludes it in (303) without necessarily meaning that they are gener-

²⁸However, “[a]lthough [the definite article; GFKH] *di* may be said to be optional in most cases, the great majority of speakers tend to use it when possible” (Faraclas 1996: 172).

ally incompatible with APCs. These questions remain open pending further research on the language.

Turning to Kwaio, I tentatively suggested in chapter 3 section 3.2 that the unexplained *a*-morpheme found in examples of APCs is an allomorph of the definite article. If this is the case, the language conforms to the third-person article generalisation, along with the other Oceanic languages Maori and Tuvaluan.

I do not have anything to say about Usan and Kamang apart from the brief overview in chapter 3 section 3.3 of the data and problems raised, since the available descriptions of both languages do not provide sufficient data to determine whether they allow articles in APCs.

The following two subsections conclude this section with more in-depth discussions of the remaining (apparent) exceptions to the third person-article generalisation, Lavukaleve and the curious patterning of APCs in Scandinavian languages.

5.2.1 Lavukaleve

Lavukaleve has no dedicated third person pronoun. Instead, it has two types of what Terrill (2003) describes as demonstrative pronouns (*foia*, *oia*) and additionally the demonstrative modifier (*hoia*). The demonstrative pronouns normally occur without full nouns, and can themselves be followed by the demonstrative modifier *hoia* as illustrated in (304a). The *hoia* forms, on the other hand, occur with full noun phrases (or in cases of clear noun ellipsis) and are in complementary distribution with the NP-final definite article. As shown in (304b), an instance of *hoia* cannot be modified by another one even if it seems to be used pronominally.

(304) a. foia hoina-ri-om masiv hin. [Lavukaleve]
 PN.NTRL.SG.M MOD.NTRL.SG.M-PSNV-M/N year(M) 3.SG.M.EFOC
 ‘That was the year.’

b. *hoia hoina-ri-om masiv hin.
 MOD.NTRL.SG.M MOD.NTRL.SG.M-PSNV-M/N year(M) 3SG.M.EFOC

Terrill 2003: 181, (220-1)

Terrill (2003: 172) suggests that certain postnominal uses of *foia*-type demonstratives, as in (305), represent essentially the same phenomenon as the APC structure in (306).

(305) a. aka **lo-sokilio** **tula-a** **la** fe **foia** hoika
 then 3DU.POSS-small.ship(F) small-SG.F ART.SG.F even PN.NTRL.SG.F there.NTRL
 lei-a.
 exist-SG.F
 ‘Their small boat, it was there.’

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- b. **ngotea** **la** **foia** hano lea-a.
 young.coconut(F) ART.SG.F PN.NTRL.SG.F then burst-SG.F
 ‘The young coconut, it burst open.’

Terrill 2003: 173, (203)/(204); emphasis added

- (306) **Lavukale e** ta a-na legis e-kae-ham
 Lavukals 1PL.EXCL time(M) 3SG.M.OBJ-in leaf(N) 3SGN.OBJ-put.up-PURP
 hi-vele ni’kol feo nato la feo.
 do/say-SUCC first 3SG.F.FOC sago.palm(F) SG.F.ART 3SG.F.FOC

‘When we Lavukals are preparing a kite to fly, the first thing [to get] is the sago.’

Terrill 2003: 171, (196); emphasis added

If *foia* in this construction is part of the *xnP* of the preceding noun and we therefore deal with the equivalent of a third person APC the presence of the definite article in this context is actually expected by (300). However, this would also predict that the available first person APC examples should contain the definite article. This is not the case as shown in (306). Whether this is a violation of (300) depends on whether the *foia*-constructions mentioned above are indeed third person APCs. Indeed, Terrill (2003: 181ff.) argues that *foia* in these constructions is not part of the *xnP* of the noun it accompanies, but rather forms a juxtaposition.

She adduces three arguments to support this view. Firstly, in this construction the *foia* demonstrative follows the definite article, see (305), which typically marks the right border of the noun phrase (Terrill 2003: 90). However, given the examples in (306) the definite article does not seem to be necessarily present with the first person pronoun in an APC. Also, it is not quite clear why the definite article would have to be the absolutely last constituent of the nominal domain – it is at least conceivable that the phenomenon is comparable to the occurrence of adnominal pronouns preceding definite articles in Spanish or Modern Greek, see section 2.4 and Höhn (2016).²⁹

A further argument is based on the observation that “small particles occasionally intervene between the two noun phrases” (Terrill 2003: 174), as illustrated in (305a). This is a stronger argument than the previous one, but it presupposes some assumptions about the positioning of these particles. Apart from the possibility that these particles could just occur in Lavukaleve noun phrases, morpho-phonological processes (e.g. Marantz’s 1988 morphological merger) could lead to a shift of material from the edge of the extended noun phrase, especially in bigger noun phrases such as the one in (305a) which might contain more than one internal morphophonological domain.

²⁹This would suggest that person and demonstratives are encoded high in the nominal domain in Lavukaleve.

Finally, the contrast in (304) between the ability of *foia* to co-occur with a *hoia* modifier and the inability of *hoia* to be modified by another instance of *hoia* might suggest that *foia* demonstratives form full noun phrases on their own, while *hoia* demonstratives do not. While this is a possible interpretation, in the first instance it only shows that these demonstratives behave differently – as a matter of fact, the ban of co-occurrence of two instances of *hoia* may be down to an abstract form of haplology-avoidance.

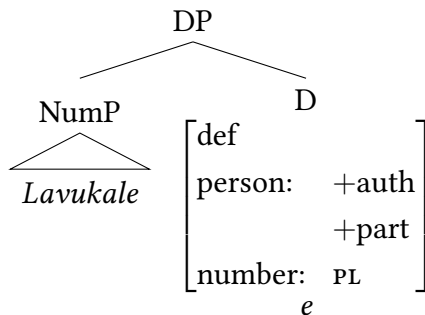
These arguments clearly show that *hoia* and *foia* behave differently syntactically and suggest that they are in different positions. It is, however, not quite as clear whether *foia* in the *foia*-construction is necessarily outside the *xnP*.³⁰ But even accepting that conclusion, the relevance of this argument to APCs depends on them actually behaving like the *foia*-construction.

While Terrill (2003: 172) suggests that the first person APC examples she supplies show the same juxtaposition as the *foia*-construction, she does not show if the arguments for her treatment of *foia* extend to the “simple” APCs as in (306). As a matter of fact, the first of these arguments, the presence of the definite article in *foia*-constructions, clearly does not hold for the APC in (306). There is no information indicating whether first or second person APCs can be split up by particles or whether they can be modified by the demonstrative modifier *hoia*.

Therefore, while I stay agnostic as to the precise analysis of the *foia*-construction, I suggest that it is crucially different from first (and presumably second) person APCs. If this means that there is no third person APC in Lavukaleve, (300) does not apply to it. If the *foia*-construction should be analysed as a third person APC, the difference in structure to “simple” first person APCs could justify its exemption from (300). If first and second person adnominal pronouns are in a different position from the tentative third person pronoun (*foia*), they could be in complementary distribution with the definite article while *foia* would occupy a different position independently of the definite article. Of course, this second analysis would raise further questions, most pressingly why third person pronouns would have to be located in a separate position. I will opt here for the first option and propose that Lavukaleve *foia*-constructions do not represent a third person APC. Instead, I propose that Lavukaleve has (head-final) pronominal determiners as sketched in (307).

³⁰Terrill (2003: 174) notes that “[w]hen the two phrases [the noun phrase and the demonstrative, GFKH] are contiguous, there is not usually an intonation break between the noun phrase and the resumptive pronoun”, which may actually provide support for *foia* not being a simple juxtaposition.

(307) *Lavukale e* ‘we Lavukals’



5.2.2 Scandinavian APC anomalies

The issues surrounding APCs in the Scandinavian languages were briefly mentioned in chapter 2 section 2.6.2.³¹ I noted there that the Scandinavian languages seem to be the only ones for which APCs appear to exhibit the pattern in (308).

(308)

	sg	non-sg
1	✗	✓
2	✗	✓
3	✓	✗ (or ✓?)

What makes the distribution of APCs in these languages remarkable is the fact that they show first and second person plural APCs, but allow third person APCs in the singular and possibly also plural. While this is somewhat similar to the pattern in languages that use demonstratives in place of third person pronouns, in contrast to those the relevant morphemes found in the third person singular contexts in Scandinavian are not demonstratives, but simple third person pronouns.

The two central questions I discuss with respect to (308) are (a) if third person plural APCs are really excluded and (b) if Scandinavian third person singular APCs are structurally comparable to those found in the first and second person plural. This is relevant to the question of whether Scandinavian languages represent counterexamples to the *third person-article generalisation* or the *Person generalisation* (according to which the availability of third person APCs in the singular would imply the availability of first and second person singular APCs, contrary to fact).

³¹I am grateful to Kari Kinn, Anders Holmberg and Sten Vikner for providing me with examples and discussing different aspects of the Scandinavian data, of which this section can unfortunately only cover a fraction.

5.2 Third person-article generalisation

The issue in (a) relates to the formal similarity of demonstratives and pronominal determiners – which “are formally identical to demonstratives in Scandinavian” (Julien 2005: 118) – to third person pronouns in the Scandinavian languages.³² However, Julien (2005: 119–123) points out that while personal pronouns distinguish nominative and non-nominative forms in Danish, written Swedish and Bokmål Norwegian, the pronominal determiners/demonstratives are case-invariant. This is illustrated for written Swedish in (309) where the personal pronoun in (309cd) varies between *de* and *dem* for the subject and direct object respectively. The pronominal determiners/demonstratives in (309ab), on the other hand, are invariantly *de*, suggesting that they are not identical to the personal pronouns.

- (309) a. **De** stark-a rysk-or-na slog henne. [Swedish]
DEF.PL strong-DEF Russian-PL-DEF beat.PST her
‘The strong Russian women beat her.’
- b. Hon slog-s av **de** stark-a rysk-or-na.
she beat.PST-PASS by DEF.PL strong-DEF Russian-PL-DEF
‘She was beaten by the strong Russian women.’
- c. **De** slog henne.
they beat.PST her
‘They beat her.’
- d. Hon slog-s av **dem**.
she beat.PST-PASS by them
‘She was beaten by them.’
- Julien 2005: 120, (4.20)

Considering the fact that there is a significant amount of variation in the extent to which pronouns in various Scandinavian varieties show sensitivity to their syntactic position (see Julien 2005 but also Parrott 2009), it seems plausible to seek an explanation in terms of morphophonological exponence. If we stick to the hypothesis that both pronouns and pronominal determiners head DPs,³³ the data seem to indicate a difference between the VI realising the non-nominative pronoun and the remaining contexts. This could either be some property exclusive to the non-nominative VI or a common property of nominative pronouns and pronominal determiners irrespective of their grammatical function. Since it is not clear in what respect the latter could be described as a homogenous class, I suggest following the for-

³²This is only relevant to the plural pronouns which lack an animacy distinction. For the singular, see the discussion below.

³³Rejecting the pronominal determiner hypothesis on these grounds would not solve the problem without a working alternative analysis. It is not clear how the common alternative of analysing APCs as some form of appositive would fare better in explaining the variation in the restrictions on APCs observed here.

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mer option. This means that there is some VI like (310a) which is inserted in non-nominative contexts³⁴ that do not involve participants and are not demonstrative. Furthermore, the VI can only be inserted at the right edge of its spell-out domain (cf. the discussion of German in section 5.1.1). Contrasting with this is the VI in (310b), which represents the default realisation of a third person D in the language and is therefore inserted in contexts that (310a) is not compatible with, including examples like (309b).

- (310) a. D[-part,-dem,+pl,-nom] ↔ *dem* / ___]_φ
 b. D[-part] ↔ *de*

Another difference between first/second person plural APCs and their tentative third person counterparts concerns the suffixal definite article. In so-called “double definiteness” languages like Swedish and Norwegian, the presence of a prenominal determiner or a demonstrative does not block the presence of the suffixal article (whereas it does in Danish or Icelandic). This is illustrated for Swedish in (309ab) and for Norwegian in (311).³⁵ In contexts without prenominal modifiers (adjectives or numerals) intervening between the prenominal determiner and the noun, like (311), the prenominal element *de* is interpreted as a demonstrative, while in the presence of prenominal modifiers like the adjective in (309ab), the xnP-initial *de* is ambiguous between a (stressed) demonstrative and a (non-stressed) prenominal determiner.³⁶

- (311) *de* student-ene [Norwegian]
 DEM.DIST student-DEF.PL
 ‘those students’

In contrast, Swedish first and second person plural APCs do not allow the presence of the suffixal article, see (312). This also holds in construction with prenominal modifiers, which

³⁴This could be implemented in terms of case assignment as classically assumed, but also in terms of surface-based analysis of morphological case (e.g. McFadden 2004, Parrott 2009). Here I use a [-nom] feature for expository purposes.

³⁵The data concerning the co-occurrence of demonstratives with suffixal articles in Swedish are complex, see Embick & Noyer (2001: 580, fn. 34) and Julien (2005: 112f.). Julien (2005: 112, fn. 2) proposes that the lack of a suffixal article on nouns following the proximal demonstrative *denna* in written Swedish “is due to a convention imposed on the formal register and not a consequence of grammar.” See also Hankamer & Mikkelsen (2005), Heck et al. (2008) and Schoorlemmer (2012) for different approaches to Scandinavian (double-)definiteness.

³⁶I set aside a discussion about the status of the co-occurrence of demonstratives with prenominal determiners in Swedish. Julien (2005: 109, (4.1)) provides the example (i), while Johannessen (2008: fn. 15) argues that such constructions are not part of the modern language.

- (i) *desse dei to eld-st-e hus-a i by-en*
 these DEF.PL two old-SUPL-DEF house-DEF.PL in town-DEF
 ‘these two oldest houses in town’

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require a prenominal determiner and postnominal definiteness marker in definite third person xnP (313a), but reject the postnominal definiteness marker in non-third person APCs (313b).

(312) vi student-er(*-na) [Swedish]
we student-PL-DEF
'we students' Julien 2005: 128, fn. 18

(313) a. de unga student-er-na
DET young student-PL-DEF
'the young students'
b. vi unga student-er>(*na)
we young student-PL-DEF
'we young students'

This suggests that adnominal plural demonstratives or prenominal determiners are not straightforwardly analysable as third person APCs in Swedish. On the other hand, at least some varieties of Norwegian allow the use of the suffixal article with first person APCs as in (314) and (315), see also Kinn (2015: 252, fn. 4). This seems compatible with a unified analysis of APCs and plural prenominal determiners and/or demonstratives in Norwegian.

(314) vi student-(er/ene) [Norwegian]
we student-PL/DEF.PL
'we students'

(315) till oss (to) (gaml-e) professor-a-ne
to us two old-DEF professor-PL-DEF
'to us (two) (old) professors' Julien 2005: 129, (4.36)

To conclude, an analysis of constructions with prenominal determiners (and possibly demonstratives) as third person plural APCs seems possible for Norwegian, Danish and Icelandic. The morphological concerns about the lack of object case-marking on the definite article could be addressed along the lines of (310) and the double definiteness data from Norwegian are compatible with such an analysis. For Swedish, the matter is complicated by the different behaviour of non-third person APCs and prenominal determiners with respect to suffixal definiteness marking. If this indicates that Swedish completely lacks third person adnominal pronouns, rather than allomorphically replacing them with definiteness markers, the question of the why remains open. Eventually, this hinges on the more general issue of the correct analysis for the suffixal definiteness markers in both Norwegian and Swedish. I

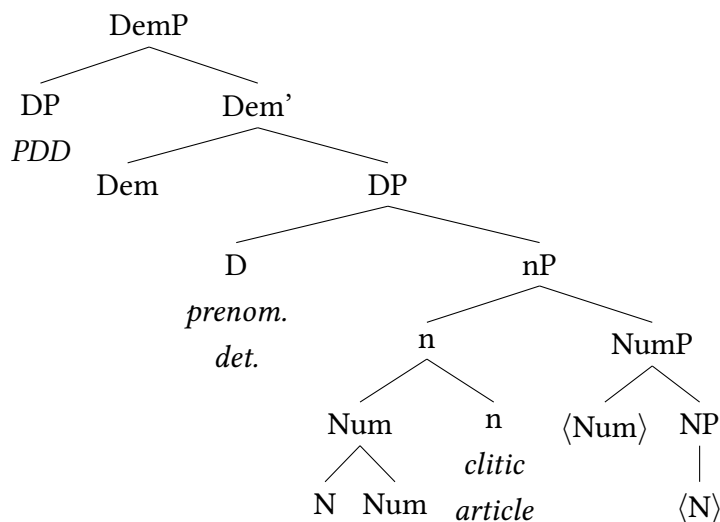
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will not enter that discussion here (see e.g. Embick & Noyer 2001 and Julien 2005), but as an alternative to rejecting the view that definite expressions correspond to third person APCs, it may be that the conditions on the realisation of the suffixal article are sensitive to third person features ([-auth,-part]) in Swedish.

Turning to the unexpected appearance of third person singular APCs in Scandinavian, the situation is more complicated than in the plural because only inanimate third singular pronouns are segmentally identical to the singular definite article (e.g. *den* for masculine and feminine gender inanimate nouns in Norwegian), while the animate third person pronouns have distinct forms (e.g. *hun* ‘she’, *han* ‘he’ in Norwegian). The availability of adnominal uses of animate personal pronouns therefore suggests that pronominal determiners/definiteness markers are not simply the “transitive forms” of third person pronouns.

In her extensive discussion of the phenomenon, Johannessen (2008) proposes that singular adnominal pronouns in Scandinavian express psychological distance, which is why she terms them psychologically distal demonstratives (PDDs).³⁷ She argues that there are two different types of this construction among the Scandinavian languages, depending on the structural position of the demonstrative. In Swedish and Danish, she proposes, the demonstrative is located in its own projection outside DP as sketched in (316).³⁸

(316)



after Johannessen 2008: 185, (104)

³⁷Cf. also Julien (2005: 123–129) and Josefsson (2006) for discussion and examples. This phenomenon is distinct from the proprial article combining with proper names in several Scandinavian varieties (and beyond), see Julien (2005: 124, fn. 12) and Johannessen (2008: 169f.).

³⁸Johannessen (2008) proposes that the demonstratives are merged as DPs in the specifier of DemP. Although Johannessen (2008: 185) claims this to be “in accordance with [the analyses of] Julien (2005) and [Josefsson (2006)]”, their analyses actually identify PDDs as realisations of a Dem (Julien 2005) or Sem (Josefsson 2006) head. It is not immediately clear why Johannessen (2008) prefers a phrasal analysis.

5.2 Third person-article generalisation

One of her observations supporting this view is that Swedish PDDs can co-occur with a prenominal determiner, taken to realise the D head:

- (317) eftersom jag behövde 2 nycklar, till 2 olika kunder– [Swedish]
 since I needed 2 keys for 2 different customers
 och som **hon** den ena tjejen hade...
 and which she the one girl.DEF had
 ‘Since I needed two keys for two different customers, and which that one girl had...’
 Johannessen 2008: 176, (53)

A related argument is made for Danish where a definite *xnP* can only bear one definiteness marker, either the suffixal article in the absence of prenominal modifiers (318a) or the prenominal determiner (318b) if there are prenominal modifiers. As shown in (319), the presence of a PDD does not change this behaviour. There is still exactly one definiteness marker, suggesting that the PDD itself does not suffice to mark the *xnP* as definite. The fact that PDDs do not interact with DP-internal definiteness marking in Danish is one of Johannessen’s (2008) arguments for claiming that PDDs in Danish are DP-external.

- (318) a. pige-n [Danish]
 girl-DEF
 ‘the girl’ after Johannessen 2008: 174, (38)
- b. *(den) store pige(*-n)
 DEF big girl-DEF
 ‘the big girl’
- (319) a. hende pige-*(n)
 her girl-DEF
 ‘that girl’ after Johannessen 2008: 174, (40)
- b. hende *(den) store pige
 her the big girl
 ‘that big girl’ after Johannessen 2008: 173, (35-37)

Notice that the use of definiteness markers with PDDs would be compatible with the predictions of the third person-article generalisation from (300) above if PDDs were analysed as third person APCs. However, the above observations set PDDs in Swedish and Danish apart from plural APCs in these languages, which interact with definiteness marking in the *xnP*. In contrast to the PDDs in (319), Danish does not allow an additional definiteness marker in APCs as shown in (320).

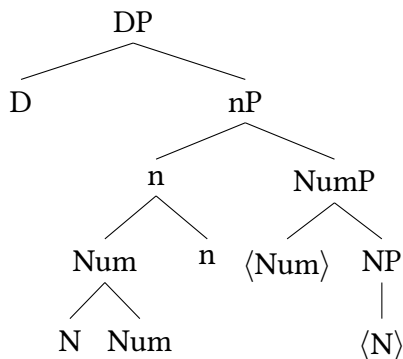
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- (320) a. vi pige-r-(*ne)
 we girl-PL-DEF
 ‘we girls’
- b. vi (*de) kloge pige-r
 we DEF intelligent girl-PL
 ‘we intelligent girls’

Swedish APCs also exclude both prenominal determiners and suffixal definiteness marking, as discussed earlier with respect to examples (312) and (313). This contrasts with the possibility of the co-occurrence of PDDs with a prenominal determiner in (317). On the basis of these patterns, I conclude that PDDs in Danish and Swedish do not correspond to third person singular APCs.³⁹

In contrast to the Swedish/Danish structure in (316), Johannessen (2008: 186) proposes that there is no distinct projection hosting demonstratives in Norwegian and Icelandic. As illustrated in (321), they are treated as instantiations of D instead. Consequently, PDDs are essentially pronominal determiners, corresponding to third person APCs. I briefly summarise one of her arguments for this analysis for each of Norwegian and Icelandic.

- (321) after Johannessen 2008: 186, (105)



In contrast to Swedish and Danish, Norwegian does not allow the co-occurrence of a PDD with a prenominal determiner (322c). Since Norwegian is a language with double-definiteness, the suffixal definiteness marker used in the presence of the prenominal determiner in (322a) remains in place with the PDD in (322b).

- (322) a. *(den) tyske ingeniør-troppen [Norwegian]
 the German engineering-troop.DEF
 ‘the German engineering troop’

³⁹An open question for Johannessen’s (2008) structural analysis of PDDs in (316) I will not further address here is why they are unavailable outside third person singular contexts. On a structural basis, one might expect them to be combinable with APCs in some way.

b. hun gamle lærerinnen vår
 she old teacher.DEF ours
 ‘that old teacher of ours’

c. *han den lille mannen
 he the little man.DEF
 intended: ‘that little man’

Johannessen 2008: 178, (66-68)

This parallels the observations made for Norwegian APCs in (314) and (315), which also replace a pronominal determiner, but can co-occur with suffixal definiteness markers.

Icelandic does not have a preposed determiner (Johannessen 2008: 183), but the fact that there is only one exponent of definiteness in the *xnP* suggests that PDDs in the language can act as exponents of definiteness. The definiteness suffix of *strákurinn* ‘the boy’ in (323a) disappears in a PDD construction like (323b). If definiteness is related to the D head in Icelandic, this suggests that the PDD is an exponent of that head.

(323) a. Vonandi kemur **strákurinn** fyrir miðnætti. [Icelandic]
 hopefully comes boy.NOM.DEF before midnight
 ‘Hopefully, the boy comes before midnight.’

b. **Hann** strákur, trompetleikari úr Jagúar var díjei.
 he.NOM boy.NOM trumpet-player.DEF from Jagúar was DJ
 ‘That boy, the trumpet player from Jagúar, was DJ.’

Johannessen 2008: 184, (98)/(99)

Icelandic APCs follow the same pattern of not requiring an additional definiteness suffix, see (324).⁴⁰

(324) við nemendur
 we students
 ‘we students’

If Norwegian and Icelandic PDDs are indeed pronominal determiners, this raises issues for the prediction made at the beginning of the chapter that languages with pronominal determiners lack third person APCs because the definite article is the adnominal form of the third person pronoun. Johannessen’s proposal means that third person singular *xnPs* in Norwegian and Icelandic can realise an adnominal D position as a pronominal determiner, but also as a third person pronoun. However, notice that the third person PDDs are still in

⁴⁰In addition to the APC in the main text, Halldór Sigurðsson (p.c.) points out a similar construction with the definite suffix, i.e. *við nemendurnir* ‘we, the students’. I suspect that this is not an APC with a pronominal determiner, but rather a type of apposition of a pronoun and a definite DP, as suggested by the English translation.

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complementary distribution with pronominal determiners and demonstratives as shown in (322). Moreover, PDDs are specifically identified as demonstratives. In the present framework, this suggests that they may be distinguished from plain pronominal determiners by a [+dem] feature (possibly alongside further features responsible for their distinct ‘psychologically distal’ interpretation like [DISTAL]). If this is correct, these examples do not present a counterexample to the claim that the lack of third person APCs in a number of languages with definite articles is due to an allomorphic relationship. Rather, they suggest a refinement of the definition of which feature combinations the D head can bear and which VIs compete for insertion. The third person pronouns compete for insertion into an adnominal D head if it is a singular [+dem] D head. For [-dem] D positions, third person pronouns are only eligible for insertion if there is no other overt material in the spell-out domain as previously suggested.

If this approach to Norwegian and Icelandic is correct and their PDDs are third person APCs, they represent counterexamples to the *Third-person article generalisation* in (300). Furthermore, they would then also show the extraordinary pattern of allowing third person APCs, but not first or second person APCs. This would provide two further exceptions to generalisation (156) from chapter 2 section 2.6.3 that the availability of third person APCs predicts the availability of non-third person APCs, suggesting that that generalisation is wrong or at least its formulation too strong. One way to address the concerns may be to relativise that generalisation to the plural as in (325).

(325) *Weaker generalisation on person in APCs:*

If a language has third person plural APCs, it has first and second person plural APCs.

This would weaken the force of the generalisation, but is in line with the now six potential exceptions listed in (326). The three languages in (a) do not distinguish number on third person pronouns, the only Wari’ APCs presented by Everett & Kern (1997: 303) are singular and the problem of Norwegian and Icelandic having third person APCs in the guise of PDDs while lacking corresponding non-third person APCs is likewise restricted to the singular, since plural first and second APCs are fine in these languages.

- (326) a. Adang
Sawila
Wersing
- b. Wari’
- c. Norwegian
Icelandic

To conclude, it seems that the analysis of Scandinavian plural pronominal determiners as (allomorphs of) adnominal third person plural pronouns is largely compatible with the pronominal determiner analysis. Regarding the question of the availability of third person singular APCs in the guise of PDDs, following Johannessen's (2008) analysis Danish and Swedish PDDs are not third person APCs, making them unproblematic for the main question discussed here. Norwegian and Icelandic PDDs, on the other hand, are analysed as third person APCs, raising a number of serious concerns. It remains to be seen whether this analysis of Norwegian and Icelandic PDDs is the correct one or whether there are alternative analyses that avoid the crosslinguistic concerns raised by a pronominal determiner analysis for these PDDs.

5.3 Number restrictions

The observation that English argumental APCs are restricted to the plural goes back at least to Postal (1969: 217). While this restriction against singular APCs has sometimes been treated as a characteristic property of APCs in general (e.g. Pesetsky 1978), the data discussed in chapter 2 section 2.6.2 show that it does not hold universally. Nonetheless, singular APCs still seem to be crosslinguistically marked, as expressed in (327).

(327) *Generalisation on number in APCs:*

If a language has singular APCs, it also has non-singular APCs.

The remainder of this section discusses the problems that proposals in the literature have in accounting for the observable variation in APC number restrictions, although I cannot offer an alternative explanation at this point.

Delorme & Dougherty's (1972) proposal for the lack of bare singular nouns in English builds on the premise that licit APCs consist of a plural pronoun in apposition to a bare plural noun (*we, ∅ students*). The singular counterpart is ungrammatical because English does not allow bare singular nouns, so instead of **I, ∅ student* they argue the actual singular form would be *I, a linguist*. Their premise of an appositive analysis for adnominal pronouns has been conclusively rejected by a number of authors on several grounds (see Pesetsky 1978, Lawrenz 1993: 78ff., Rauh (2004) and chapter 1). An empirical problem for this account is the fact that article-less languages like Russian also lack singular APCs (Pesetsky 1978).

Bernstein (2008a,b) suggests an explanation for the lack of singular APCs in English on the basis of Kayne's (2000) claim that *I* lacks grammatical number and that *you* is grammatically plural. This means that neither of them is grammatically singular and, therefore, expressions like **I idiot* or **you linguist* are ungrammatical because number agreement inside the xnP fails.

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There is a weak and a strong interpretation of this account. If the correlation between the lack of singular APCs and of pronouns marked as singular goes both ways, all languages banning singular APCs should have “singular” pronouns that are grammatically not singular. This seems to be too strong, as I am not aware of arguments that the singular pronouns in languages like Spanish or Dutch, which lack singular APCs, are not grammatically singular in the way suggested by Kayne (2000) for English.

The weak interpretation of the account would be that languages lacking singular number marking on first and second person pronouns do not allow singular APCs, but that a language may ban singular APCs for other reasons. This makes much weaker crosslinguistic predictions which would need to be tested in languages whose pronominal system could be subject to an analysis along the lines of Kayne (2000). I am not aware of other languages having been analysed this way, so the range of application of this weak interpretation seems limited.

In addition to these empirical limitations, the precise implementation of the account raises questions. If a mismatch of the number features of the pronoun and the nominal is responsible for the ungrammaticality of **you linguist*, this implies that personal pronouns carry an (interpretable) number feature independently of that of the remainder of the xNP they are part of. While I do not share this assumption, for argument’s sake let us assume that this is the case. Since there is no asymmetry between both feature sets, an analysis along the lines of Chomsky’s (2001) Probe-Goal system would not be applicable. Instead, feature matching could be ensured by means of a symmetric agreement operation (e.g. Ackema & Neeleman 2013) which unifies the feature sets of agreeing elements and rules out agreement relations between contradictory feature values. This would correctly rule out a [+plural] pronoun *you* in the context of a [-plural] (or [+singular]) noun *linguist*. However, given Kayne’s (2000) assumption that first person *I* simply lacks number features, no violation would be predicted for **I linguist*. Since there are no number features on *I* that would conflict with those on *linguist*, nothing would block the symmetric agreement relation. Requiring strict identity of ϕ -features to address this case would raise problems of its own, as it would rule out exactly the unagreement data that Ackema & Neeleman (2013) argue to provide evidence in favour of a symmetric model of agreement, see chapter 6. This range of problems suffices to explain why I cannot adopt Bernstein’s (2008a) analysis for the lack of singular APCs.⁴¹

A common theme among commentators on the number asymmetry is that the “obligatorily unique” (Pesetsky 1978: 352) reference of singular pronouns or the fact that they are “non distributable” (Torrego 1996: 115) prevents them from appearing adnominally, for example

⁴¹While I focus on argumental APCs, Bernstein’s (2008b) discussion explicitly treats vocative DPs like *you students!* as prenominal determiner structures with a plain [D NP] structure. This raises the additional question of why the lack of number agreement supposedly responsible for the ungrammaticality of singular argumental APCs in English does not also rule out singular exclamatives like *you lucky bastard!*

because “the descriptive content of [their; GFKH] referents is usually presupposed and does not need to be asserted” (Noguchi 1997: 776). Discussing Japanese, Inokuma (2009: 39f.) makes the very similar proposal that a nominal expression “that denotes properties cannot appear if the Indexicals [i.e. the adnominal pronoun in the cases relevant here; GFKH] in Spec,CaseP directly refer to all of the individuals denoted by the whole DP” (Inokuma 2009: 40, (34)).

The main problem with these accounts is that they are too strong if the semantic restrictions they appeal to are taken to be universal or a (virtual) conceptual necessity, since that would wrongly predict that no language allows singular APCs. On the other hand, if these restrictions are supposed to only apply in languages without singular APCs, we end up simply restating the original question about the determining factor for the distribution of singular APCs as a question about what determines whether pronouns in a given language are subject to this semantic restriction.

While these approaches do not provide an explanation for the crosslinguistic variation of number restrictions in APCs, the underlying intuition is nonetheless relevant for understanding the general markedness of singular APCs. Even in languages with singular APCs like German singular APCs are marked insofar as their distribution seems to have stricter contextual requirements. Rauh’s (2004) account for this effect offers an implementation of the above intuitions in pragmatic terms, which may provide a fruitful basis for understanding the crosslinguistic markedness patterns.

Rauh (2004) explains the fact that the use of singular APCs is more restricted than that of plural APCs in German by appealing to Gricean maxims of relevance and quantity (Grice 1975): supply as much relevant information as necessary and not more. Plural APCs comply with the requirement to be informative, since the overt nominal provides information useful for identifying the reference of plural pronouns. In the case of first and second person singular pronouns, the referent is usually unambiguously contextually defined. So in order to be informative, the overt noun in a singular APC needs to provide some other contextually useful information about the referent. The reason for the asymmetry between the easy availability of plural APCs and the more restricted range of uses for singular APCs is the fact that the former more trivially satisfy the pragmatic requirements for the felicitous use of APCs.

The precise conditions for determining whether the informativity/relevance requirement is met are not clear, but example (328) illustrates a felicitous context. Here, the singular APC characterises the speaker as a decent citizen. In the given context this explains, on the one hand, why the author of the comment has a special interest in the workings of German media and, maybe more importantly, justifies their outrage.

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- (328) Bei dem Versuch Herrn Varoufakis zu demontieren [German]
at the attempt Mr.ACC Varoufakis to dismantle
und das im ZDF live bei RTL Clown Jauch hat man auch
and that in.DET ZDF live at RTL clown Jauch has.3SG one also
mich ehrlich aufrechten Bürger durch den Kakao gezogen.
me honestly upright citizen through DET cocoa drawn
'In the attempt of dismantling Mr Varoufakis, and that live on the ZDF (state television channel) with RTL (private TV channel) clown Jauch, they have also taunted me honest and upright citizen.'⁴²

Thanks to its flexibility, Rauh's (2004) proposal may also provide a framework for understanding the general crosslinguistic markedness pattern, i.e. why non-singular APCs generally have a wider distribution as expressed in the generalisation in (327). However, this can only be the beginning of an account of number asymmetries in APCs. Even for German, there remain important questions concerning the distribution of singular APCs (e.g. are there ways of predicting more precisely which contexts license the use of singular APCs; how do singular APCs relate to expressions of the sort *you as a linguist?*), let alone for other languages with less research on their singular APCs. A theory that makes predictions about whether or not a particular language allows singular APCs remains an objective for future research.

5.4 Summary

This chapter addressed person and number restrictions in APCs. The markedness of third person APCs can be partly explained by the pronominal determiner hypothesis and the assumption that third person pronouns and definite articles are allomorphs. The observation that languages allowing third person APCs tend to lack articles further supports that view. The small number of article-less languages without third person APCs may be explained along these lines if the pronominal determiner analysis is adopted. However, the lack of third person APCs in several languages with dAPCs remains problematic, since adnominal pronouns and definite articles cannot be allomorphs in these structures. The *Third person-article generalisation* from chapter 2 states that languages with third person APCs and articles should display dAPCs. I have largely confirmed this and discussed potential counterexamples from the present survey. Finally, I have concluded that although no currently available account makes clear predictions regarding the crosslinguistic distribution of number restrictions on

⁴²User *wolverinef22* on <https://www.youtube.com/watch?v=Nm32QfNlp6o>, accessed 24 March 2015.

APCs, Rauh's (2004) pragmatic approach provides a promising perspective on the general markedness of singular APCs observed in chapter 2.

This concludes part II, which has shown that, while the pronominal determiner analysis accounts for parts of the data on nominal person, there is clear evidence of crosslinguistic variation in the structural location of nominal person. Part III turns to phenomena involving nominal person beyond plain APCs.

Part III

Nominal person beyond APCs

The chapters in this part discuss non-overtly person-marked *xnPs* and the interaction of person features with demonstrativity.

Chapter 6 presents a detailed account of the unagreement phenomenon, an apparent failure of subject-verb agreement observed in a number of consistent null subject languages, arguing that it depends on a structure where person is encoded separately from definiteness (chapter 4). This allows independent null spell-out of the person-encoding head, which I take to be regulated by a [\pm dem(onstrative)] feature associated with the same head as person in the relevant languages.

In chapter 7, I further address the interaction of person and demonstrative features. The first part deals with the personal pronoun-demonstrative constructions (PPDCs) from chapter 2 section 2.5 where personal pronouns are not in complementary distribution with demonstratives. While this suggests that person features are not necessarily syntactically encoded in the same position as other deictic features, the second part of the chapter discusses phenomena that suggest some sort of connection or interaction between person and demonstrative (or deictic) features in a number of languages. This may lend support to Harbour's (2016) proposal that demonstrative systems can be built on the basis of person features.

Chapter 6

Unagreement

In this chapter, I present an analysis for the unagreement phenomenon (Hurtado 1985 for the term), which describes configurations where an apparent third person subject co-occurs with non-third person verbal agreement.¹ This is illustrated in (329a) for a definite plural subject in Greek. Examples of this sort with quantified subjects as in (329b) were briefly addressed in chapter 4 section 4.1.1, and the Greek example introduced there is repeated in (329b).

- (329) a. Oi anarchikoi thel-oume na kyvern-ame [Greek]
DET.NOM.PL anarchists want-1PL SBJV control-1PL
tis zoes mas...
DET.ACC.PL lives our
'We anarchists want to control our (own) lives...'²
- b. Polloi astheneis ech-oume provlimata.
many.NOM.PL patients have-1PL problems
'Many of us patients have problems.'

The central point of this chapter is the rejection of the notion that the subjects in these contexts carry third person features. I propose instead that they bear the person features reflected by the verbal agreement. The subjects in (329) are therefore analysed as first person *xnPs*, which trigger first person agreement for exactly that reason.

The crosslinguistic distribution of unagreement is argued to depend on two properties. First, consistent pro-drop seems to be a requirement for allowing unagreement (see also Choi 2013), and secondly I propose that there is a limited correlation between the use of definite

¹Parts of the discussion in this chapter have been published as Höhn (2016) and aspects of this research were first reported in Höhn (2012b).

²Found on <https://twitter.com/athyrostomix/status/646619472955113472>, accessed 21 July 2016.

articles in APCs and the availability of unagreement (see also Choi 2014b for a slightly different implementation of these intuitions).

The next section provides an overview of the crosslinguistic distribution of unagreement. Section 6.2 comments on previous approaches to the phenomenon and argues that in spite of superficial similarities to the imposter phenomenon (Collins 2014a, Collins & Postal 2012) unagreement and imposters are distinct phenomena, *pace* Dudley's (2014) analysis of Spanish unagreement data as imposters. Section 6.3 presents my analysis of unagreement with a focus on Modern Greek and to a lesser extent Spanish and the contrast with standard Italian with respect to the availability of unagreement. Section 6.4 concludes by discussing the predictions of the analysis for the languages sampled in chapter 2 and briefly addressing some problematic data.

6.1 Crosslinguistic distribution of unagreement

There has been ample recognition in the literature of unagreement in Spanish, as well as a variety of analyses, cf. Ackema & Neeleman (2013), Bosque & Moreno (1984), Hurtado (1985), Longobardi (2008), Ordóñez (2000), Rivero (2008), Rodrigues (2008), Saab (2013, 2007), Suñer (1988), Taraldsen (1995), Torrego (1996), Villa-García (2010). Instances of unagreement in other languages have received less attention though, and to my knowledge there are very few accounts addressing the crosslinguistic distribution of unagreement. Section 6.2 provides an overview over these previous approaches.

As for further instances of unagreement, Norman (2001) and Osenova (2003) deal with Bulgarian, and unagreement in Greek is mentioned by Stavrou (1995: 236f., fn. 33) and analysed in more detail by Choi (2013, 2014b) and Höhn (2016).³ As has only come to my attention recently, Nash (to appear) discusses unagreement in Georgian. In the remainder of this section I survey various instances of the unagreement phenomenon to identify factors relevant to its crosslinguistic distribution.

Examples of unagreement from Spanish and a number of other languages are presented in (330). The first four are Romance. Catalan and Galician are found on the Iberian Peninsula, while Aromanian (or Vlach) is a minority language spoken in Greece. Furthermore, I provide examples of unagreement from standard modern Greek and a Greek variety spoken in southern Calabria (Italy). Finally, there are two examples from the South Slavic languages Bulgarian and Pomak. Note that each language allows first and second person plural subject

³Norman (2001) also notes previous treatments of Bulgarian by Stojanov (1964: 313) and Popov (1988: 11) and refers to Piper (1998: 28-29) for the availability of a similar construction in Slovenian and its absence in Bosnian-Croatian-Montenegrin-Serbian (BCMS).

6.1 Crosslinguistic distribution of unagreement

agreement marking in these contexts, even though I only give one example per language here. Unattributed examples were elicited by myself.

- (330) a. Las mujeres denunciemos las injusticias. [Spanish]
 the women denounced.1PL the injustices
 ‘We women denounced the injustices.’ after Hurtado 1985: 187, (1)
- b. Els estudiants vam fer un pastís. [Catalan]
 DET.PL students AUX.1PL make a cake
 ‘We students made a cake.’
- c. Os estudantes fixestes pan. [Galician]
 DET.PL students made.2PL bread
 ‘You students made bread.’
- d. Pikurar-li adrem pini. [Aromanian]
 shepherd-DET.PL made.1PL bread
 ‘We shepherds made bread.’
- e. Oi foitites ftiaxate keik. [Std. Mod. Greek]
 DET.NOM.PL students made.2PL cake
 ‘You students made cake.’
- f. Ta pedia pezome me ta chartia. [Calabrian Greek]
 DET.NOM.PL children play.1PL with DET.ACC.PL cards
 ‘We children play cards.’ Höhn et al. to appear
- g. Studenti-te izpekoxme keks. [Bulgarian]
 student-DET baked.1PL cake
 ‘We students baked a cake.’
- h. Örendji-eve-so nasmeme so. [Pomak]
 student-PL-DET1 laughed.1PL REFL
 ‘We students laughed.’

Unagreement is not restricted to Indo-European languages as the examples in (331) from Swahili (Niger-Congo), Georgian (Kartvelian) and Warlpiri (Pama-Nyungan) show. In contrast to the previous examples there are no overt definite articles involved here, clearly due to the general lack of definite articles in these languages.

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- (331) a. Wa-nafunzi m-me-oka m-kate. [Swahili]
 2^{NCL}-student 2PL-PST-bake SG-bread
 ‘You students baked a bread.’⁴
- b. Ekim-eb-ma v-xat’e-t es. [Georgian]
 doctor-PL-ERG 1-draw.AOR-PL this.NOM
 ‘We doctors drew this.’ Nash to appear: (11)
- c. Ngarka ka-rnalū purlami. [Warlpiri]
 man AUX-1PL shout
 ‘We men are shouting.’ after Lyons 1999: 144, (14c)

All clear cases of unagreement I am aware of involve null subject languages, so I assume pro-drop to be a necessary condition for unagreement (cf. also Choi 2013, 2014b for the same view).⁵ However, pro-drop is clearly not a sufficient condition for unagreement, since pro-drop languages like Italian, European Portuguese (EP), Bosnian-Croatian-Montenegrin-Serbian (BCMS) and Turkish disallow the prototypical unagreement configuration, as illustrated in (332) and (333).

- (332) a. *Gli studenti lavoriamo molto. [Standard Italian]
 DET.PL students work.1PL much
intended: ‘We students work much.’
- b. *Os portugueses bebemos bom café. [European Portuguese]
 DET.PL Portuguese drink.1PL good coffee
intended: ‘We Portuguese drink good coffee.’
- c. *A diákok megsütöttük a tortát. [Hungarian]
 DET students baked.1PL the cake
intended: ‘We students baked the cake.’
- (333) a. *Studenti smo kupili krompir. [BCMS]
 students AUX.1PL bought.PL potatoes.PL
intended: ‘We students bought potatoes.’
- b. *Kız-lar dans et-me-yi sev-er-iz. [Turkish]
 girl-PL dance make-INF-ACC like-AOR-1PL
intended: ‘We girls like to dance.’

⁴Noun class 2 is plural number, verbal agreement is for second person.

⁵Potential instances of unagreement from French are no problem for this view if colloquial French has null subjects (Culbertson 2010, Roberts 2010b, Sportiche 1999, Zribri-Hertz 1994). See also Höhn (2016: 546f.).

The presence of a definite article is a hallmark of the classical unagreement configurations in (330). Nevertheless, the existence of article-less languages with unagreement (331) and of languages with a definite article but without unagreement (332) suggests that unagreement is not related to the lack of an overt article *per se*. The relevance for unagreement of the definite article in those languages that have it will be discussed in section 6.3.1, where I argue that the availability of unagreement correlates with the presence of definiteness marking in APCs.

For the rest of this chapter, I am only concerned with null subject languages showing overt definite articles, i.e. the contrast between the languages in (330) and (332). The question of how the current analysis relates to the languages without articles in (331), and to article-less languages in general will remain open for future research.

6.2 The theoretical challenge of unagreement

In this section, I outline the issues unagreement raises for asymmetric theories of agreement and the types of responses to them in the literature. In contrast to the symmetric view of agreement taken in lexicalist theories like LFG (Bresnan 2001: ch. 8) and HPSG (Müller 2008: ch. 13), where verbal and nominal ϕ -features are independently generated and their compatibility insured by unification, asymmetric theories of agreement treat subject-agreement morphology on the verb as dependent on, or controlled by, the ϕ -features of the subject. For concreteness, consider the *probe-goal* conception of Chomsky (2001, 2004, 2008) where a head acts as a probe by virtue of having an unvalued feature and enters into an Agree relation with the closest element with a corresponding valued feature in its c-command domain. The relevant value of this goal is then transferred onto the probe by a Match operation like (334).

- (334) Given a well-formed Agree relation of which α and β are the terms (i.e., Probe or Goal) where α 's feature matrix contains [Att_i: __] and β 's contains [Att_i: val], for some feature Att_i, copy val into __ in α 's feature matrix. Roberts 2010a: 60, (29)

In subject-verb agreement, the valued ϕ -features of a subject DP are the source for the verbal ones on the unvalued probe T. Unagreement configurations present a challenge to this view since they seem to involve lexical DPs, by assumption third person, causing verbal first or second person agreement. Irrespective of the exact characterisation of the problem, which depends on the analysis of third person,⁶ this feature mismatch raises serious questions about the viability of asymmetric approaches to agreement.

⁶ If third person is a “non-person” (Benveniste 1971) marked by the *absence* of features relating to discourse participants (Harley & Ritter 2002, Panagiotidis 2002), then the verbal ϕ -features on T simply lack a nominal controller in unagreement configurations, cf. (ia). If third person corresponds to substantive features, as I assume here following Nevins (2007, 2011), unagreement configurations display an outright mismatch between the ϕ -features on the subject and T, see (ib).

There are two general approaches to this problem in the literature. One set of analyses treats unagreement as a real lack of agreement and as evidence for the need to revise the agreement mechanism (Ackema & Neeleman 2013, Mancini et al. 2011, Norman 2001, Ordóñez 2000, Ordóñez & Treviño 1999, Osenova 2003, Villa-García 2010). In contrast, a variety of alternative analyses identify the controller or goal of agreement as the key to explaining unagreement – either because the actual agreement controller in unagreement configurations is a silent pronoun rather than the overt “unagreeing” DP (Bosque & Moreno 1984, Hurtado 1985, Popov 1988, Rodrigues 2008, Suñer 1988, Torrego 1996), or because the overt subject DP actually contains the relevant ϕ -features (Choi 2013, 2014b, Höhn 2016, Saab 2013, 2007, Stavrou 1995), as I will also argue in section 6.3. The remainder of this section will briefly discuss the alternative approaches.

6.2.1 Unagreement is related to the agreement mechanism

The hypothesis that unagreement involves an actual lack of agreement has been adopted by what I will call ALA (actual lack of agreement) accounts. They advocate two sorts of reactions to the presumed lack of agreement: either modification or rejection of asymmetric theories of agreement.

The former approach is represented by Villa-García’s (2010) claim that unagreement and similar effects in the grammar of Spanish show that Chomsky’s (2001) Maximize Matching Effects Condition may be violated in Spanish to the effect that exactly one ϕ -feature on a probing T may remain syntactically unvalued. This feature is then free to receive a value by other means, e.g. through pragmatics.

On the other hand, several analyses implicitly or explicitly reject the asymmetric view of agreement in favour of a symmetric one, where nominal and verbal ϕ -features are generated independently from each other,⁷ for example Osenova’s (2003) HPSG-based account of Bulgarian unagreement and Mancini et al.’s (2011) notion of “reverse Agree.” The most detailed argument from unagreement for symmetric agreement is probably made by Ackema & Neeleman (2013) though.

They adopt a grammatical architecture of “mappings between semantics and LF, between LF and PF, and between PF and phonology” (Ackema & Neeleman 2013: 296) with specific

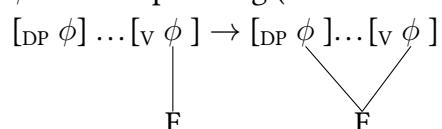
-
- (i) a. $DP_{\text{subj}}\{\phi: __\}\dots T\{\phi: [\text{participant}]\}$ [3rd = non-person]
b. $DP_{\text{subj}}\{\phi: [-\text{auth}, -\text{part}]\}\dots T\{\phi: [+ \text{auth}, + \text{part}]\}$ [specified 3rd person]

⁷For the interpretability of verbal ϕ -features cf. the hypothesis that in null subject languages verbal inflection satisfies the EPP and receives the subject theta-role of the verb (Alexiadou & Anagnostopoulou 1998, Barbosa 1995, Borer 1986, Jelinek 1984).

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well-formedness conditions on mappings and representations. Furthermore, ϕ -features are represented by geometries as advocated by Harley & Ritter (2002), meaning that third person is radically underspecified for ϕ -features (cf. fn. 6 above) and hence less specific than first or second person. Feature hierarchies can be associated in the style of autosegmental phonology with DPs as well as verbs. These associations may be manipulated by syntactic operations. On this basis, Ackema & Neeleman (2013) propose that an operation of ϕ -feature spreading is responsible for unagreement by associating non-third person features base-generated on the verb with the DP as in (335). This is possible because the DP is assumed to be third person, which in this framework effectively equates to the absence of ϕ -features. For further details on the proposal the reader is referred to the original paper.

(335) ϕ -feature spreading (Ackema & Neeleman 2013: 302, (19))



Finally, Ordóñez & Treviño (1999) and Ordóñez (2000) develop the hypothesis that unagreement involves a lack of agreement on the basis of Uriagereka's (1995) big DP analysis for clitic doubling. They suggest that subject agreement inflexion is a clitic heading a big DP containing the doubled subject. This big DP inherits the ϕ -features of the clitic and the doubled DP by Spec-head agreement, accounting for the fact that pronouns coindexed with an unagreeing DP (adnominal pronouns in the terminology employed in this thesis) have to agree in person with the verbal inflexion. Hence, this view implies that there is no direct Agree relation between the doubled subject and the verb.

This solution seems unattractive since the issue with unagreement is not a general lack of agreement. Some relationship between the subject agreement clitic and the doubled DP is required in order to rule out illicit feature mismatches, otherwise it is not clear why a third plural pronominal DP could not combine with first plural subject inflexion or the other way around as in (336). For this line of argument and comparable Spanish examples see also Saab (2013: 198f.)).

- (336) a. *Atoi katalavainoume.
 they understand.1PL
- b. *Emeis katalavainoun.
 we understand.3PL

An issue concerning all ALA accounts is that they have not so far offered a satisfactory explanation for the crosslinguistic distribution of the phenomenon. Although Ackema & Neeleman (2013) suggest that the availability of feature spreading is what sets Spanish apart

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from Italian in that respect, the explanatory power of that approach seems rather limited. Unless feature spreading is shown to operate elsewhere in the grammar, it is basically a restatement of the fact that Spanish has unagreement and Italian does not.

The matter is further complicated by the observation that languages seem not to be necessarily uniform in their availability of unagreement. Although unagreement is not normally an option in European Portuguese as discussed in section 6.1 and shown by (337a), it turns out to be possible in constructions involving cardinal numbers as illustrated in (337b), due to João Costa (p.c.).

- (337) a. Nós/*os portugueses bebemos bom café. [European Portuguese]
we/the Portuguese drink.1PL good coffee
'We Portuguese drink good coffee.'
- b. Ficamos os dois estudantes em casa.
stayed.1PL the two students in house
'We two students stayed at home.'

For ALA accounts, this would seem to suggest that EP has some operation like Ackema & Neeleman's (2013) ϕ -feature spread or Villa-García's (2010) pragmatic feature valuation after all, but it is not clear how it could be non-stipulatively restricted to apply only in the appropriate contexts. On the other hand, a structure-based account like the one advocated here can link such language-internal variation to the presence of the definite article in adnominal pronoun constructions with a numeral in EP (Costa & Pereira 2013), see (338).

- (338) nós os dois
we the two

Moreover, Höhn (2016) observes a contrast between Spanish and Modern Greek with respect to the availability of unagreement with distributive and negative quantifiers which is problematic for ALA accounts. Spanish allows unagreement for subjects containing quantifiers like *cada* 'each' and *ninguno* 'no one' as illustrated in (339). Their Greek counterparts, on the other hand, are ungrammatical as shown in (339).

- (339) a. Cada alumno hablamos diferente. [Spanish]
each student.SG talk.1PL differently
'Each of us students talks differently.' Ackema & Neeleman 2013: 315, (48)
- b. Ninguno hablamos varios idiomas.
no one.SG speak.1PL several languages
'No one of us speaks several languages.' Rivero 2008: 230, (31b)

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- (340) a. *(O) *kathe mathitis milame diaforetika.* [Greek]
 DET.NOM.SG each pupil speak.1PL differently Höhn 2016: 551, (16b)
- b. **Kanenas de milame diafores glosses.*
 nobody NEG speak.1PL various languages

Ackema & Neeleman (2013) suggest that the possibility of unagreement in Spanish examples like (340a) results from the lack of contrasting plural forms for the quantifiers *ninguno* ‘nobody’ and *cada* ‘each’. Their principle of Maximal Encoding (a variant of Kiparsky’s (1973) Elsewhere Condition or Halle’s (1997) Subset Principle) only blocks plural agreement morphology with singular subjects if there is an alternative plural form of the subject. This account runs into problems with the Greek data. Neither *kathe* ‘each’ nor *kaneis* ‘nobody’ (nor their variants discussed by Höhn 2016: 550) have a plural form, so Ackema & Neeleman’s (2013) account predicts the same pattern for Greek and Spanish – contrary to fact. Unagreement is strictly out with the negative quantifier and restricted to very specific distributive contexts with *kathe*.⁸

So while it may be possible to retain Ackema & Neeleman’s intuition that the relevant Spanish quantifiers are underspecified for number, the generalisation “that quantificational unagreement is allowed with plural quantifiers, and with singular quantifiers as long as they do not have a plural counterpart” (Ackema & Neeleman 2013: 317) cannot be quite correct. Adding to the controversial status of paradigms as a primitive of grammar (Bobaljik 2008), lack of a paradigmatic opposition turns out to be empirically problematic as a predictor for quantificational unagreement in the face of the Greek data.

Finally, the hypothesis that there is an actual lack of agreement in unagreement depends on the assumption that non-pronominal DPs necessarily have to be analysed as third person across languages. However, it is not clear that this is the case (cf. section 6.2.2.2). Against this background, I now turn to proposals that link the phenomenon to properties of the unagreeing DP itself.

6.2.2 Unagreement is related to properties of the DP

There are several alternative analyses of unagreement that do not view it as a lack of agreement, but explain it in terms of the make-up of the unagreeing DP. They fall into a group of accounts where the overt DP_{subj} is not in fact the subject, but related to the actual subject and agreement controller, typically *pro*, by an A-Bar chain (Hurtado 1985, Torrego 1996) or

⁸See Höhn (2016: 550, fn. 8) for some restricted contexts where Greek *kathe* ‘each’ may allow unagreement after all.

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apposition⁹ (Bosque & Moreno 1984; Rodrigues 2008; according to Norman’s 2001 summary also Popov 1988 for Bulgarian), and a group that argues that the subject DP itself contains the ϕ -features expressed in the verbal agreement morphology – the “hidden feature” perspective in Ackema & Neeleman’s (2013) terminology.

6.2.2.1 DP_{subj} is not the agreement controller

One way of analysing unagreement is to assume that the overt DP in unagreement configurations is left dislocated and forms an A-Bar chain with the silent pronominal subject of the clause. Sentence initial full DP subjects in null-subject languages have indeed been argued to be left dislocated (e.g. Alexiadou & Anagnostopoulou 1998, Ordóñez & Treviño 1999). However, unagreement is not restricted to sentence initial subjects as shown by the postverbal subject in the Greek example (341), which is problematic for an account relying on left-dislocation of unagreeing subjects. I refer to Ackema & Neeleman (2013: 311–313) for further discussion.

- (341) Min psachneis to portofoli sou, [Greek]
NEG search.2SG DET wallet your
tha plirosoume [oi kathigites] apopse.
FUT pay.1PL DET.NOM.PL professors tonight
‘Don’t look for your wallet, tonight we professors are going to pay!’
Höhn 2016: 549, (9)

Appositive analyses, on the other hand, capitalise on the optionality of an overt pronoun in the core unagreement cases, illustrated in (342). They hold that unagreement involves the same structure with *pro* in place of an overt pronoun.

- (342) (Emeis) oi ergazomenoi tha antistathoume. [Greek]
we DET.NOM.PL workers FUT resist.1PL
‘We workers will resist.’

Crucially, this relies on an appositive analysis of *we linguists*-type adnominal pronoun constructions (Cardinaletti 1994), which I argued against in chapter 1 section 1.2.3 and in chapter 4 section 4.1.2. It also unclear how these analyses would rule out the apposition of the overt *emeis* ‘we’, but not its covert *pro* counterpart in the type of quantificational unagreement illustrated in (343) and further discussed in chapter 4 section 4.1 and section 6.3.3 of this chapter.

⁹Den Dikken (2001) also assumes an appositive analysis for British English “plurinals” of the *the committee have decided* type and Costa & Pereira (2013) adopt it to explain how European Portuguese *a gente* ‘we’ (literally ‘the people’) comes to trigger first plural agreement.

- (343) (*Emeis) kapoioi foitites echoume kourastei. [Greek]
we some.NOM.PL students have.1PL gotten.tired
'Some of us students have gotten tired.'

This concludes the brief review of analyses according to which agreement is not controlled by the apparent subject in unagreement and leads to the final group of analyses.

6.2.2.2 Hidden features

According to the hidden-feature view, which I am defending in this chapter, the impression of a mismatch arises because relevant non-third person features are not overtly expressed on the agreement controlling DP. This type of account is explicitly rejected by Norman (2001) and Ackema & Neeleman (2013: 310f.). The latter raise the four points of criticism in (344). I will briefly address them here with the exception of (344d), which will be the topic of section 6.3.

- (344) a. psycholinguistic data indicating a three-way distinction between agreement, unagreement and failure of agreement (Mancini et al. 2011)
b. the absence of R-expressions with inherent person features in Spanish
c. the “apparent universal absence of a spell-out of such [i.e. person] features on R-expressions” (Ackema & Neeleman 2013: 310)
d. difficulties in accounting for the crosslinguistic variation of unagreement

The first issue concerns an ERP experiment on Spanish by Mancini et al. (2011) that showed a three-way distinction in the processing of items with an agreement mismatch, regular agreement and unagreement. Ackema & Neeleman (2013) follow them in interpreting this as indication of a “reverse agreement” mechanism. Considering that Mancini et al.’s (2011) experimental material only contained preverbal subjects though, their results can at least as plausibly be interpreted as an issue of performance as of competence grammar (cf. in particular Neeleman & van de Koot 2010). Since the subject *xnP* is parsed before the verbal inflection and lacks overt person marking, assigning it third person by default is a plausible parsing strategy. Upon encountering the verbal inflection the parser will be forced to amend the structure (and interpretation) of the subject *xnP*, while in “regular” agreement no such recovery mechanism is required, accounting for the difference in behaviour between both types of agreement. Importantly, the default nature of third person is a property of the parser on this interpretation, not of all non-pronominal DPs.

Concerning (344b), consider that person is a discourse-related property, dependent on the role of the denoted entity with respect to the speech act (see chapter 1). An R-expression with inherent person features would denote an entity that is *inherently* speaker, addressee

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or non-participant in any speech context. Maybe Portuguese *a gente* ‘the people’ in its first person plural use (Costa & Pereira 2013) could be viewed as such a case, but the scarcity of the phenomenon does not seem very surprising.

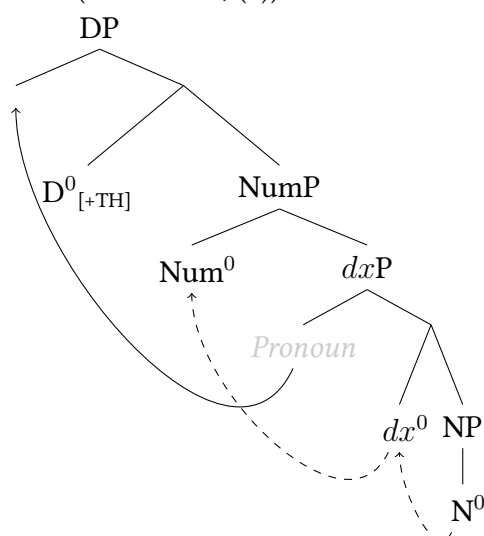
Finally, much of this thesis is devoted to showing that, contrary to Ackema & Neeleman’s claim in (344c), overt person marking on DPs is actually attested. Apart from the proposal that APCs like English *we linguists* represent a productive means of nominal person marking, the languages described in chapter 2 section 2.3.4 as having clitic or affixal person marking may represent even clearer examples of languages that “spell-out [...] person features on R-expressions”. In conclusion, the criticism directed at hidden feature accounts does not seem to be sufficient to dismiss it.

The main difference between the hidden feature proposals in the literature is where the person features of the unagreeing subject are located: on the same head as the definite article (Saab 2007, 2013), on a head distinct from it (Stavrou 1995; see also this chapter and Höhn 2016), or on a phrasal constituent in SpecDP (Choi 2013, 2014b).

Saab’s (2007, 2013) analysis builds on the classical pronominal determiner account (Abney 1987, Postal 1969) assuming that, in contrast to English, Spanish simply does not realise the D head with its person features by a pronominal. However, this account does not address the crosslinguistic distribution of unagreement nor the problem that the pronominal determiner analysis does not transfer to the analysis of Spanish adnominal pronoun constructions given that the language uses dAPCs (cf. chapter 4 and section 6.3.1).

Choi (2013, 2014b), on the other hand, rejects the pronominal determiner analysis as mentioned earlier in chapter 4 section 4.1. He argues that adnominal pronouns, as well as demonstratives, are merged in the specifier of a deictic *dxP* and move to Spec,DP, see chapter 1 section 1.2.2 and the structure sketched in (345).

(345) Choi (2014b: 141, (3))



His approach to unagreement is similar to the one I advocate below, insofar as they both emphasise the connection between the presence of definite articles in APCs and the availability of unagreement. Choi formulates this in the generalisation in (346).

- (346) *PNC pro-drop generalization (final version)*: Choi 2014b: 212, (43)
 PNC pro-drop [i.e. unagreement; GFKH] is allowed only when
- a. the predicate agrees with the PNC [=APC] in consistent pro-drop languages, AND
 - b. the PNC [=APC] contains a definite article.

In contrast to the account developed below, however, Choi assumes no structural difference between languages with dAPCs and unagreement on the one hand and those with APCs without definite articles (i.e. pronominal determiners). Unagreement is assumed to involve a regular APC structure with a silent *pro* in SpecDP. On the one hand, this requires licensing and identification by the T head probing the complex DP that *pro* is part of in the widely assumed manner (Rizzi 1986, Roberts & Holmberg 2010). Additionally, pro-drop in such contexts requires an overt D which acts as an intermediate licenser in order to establish an agreement chain between *pro* and the main pro-drop licenser T. This is supposed to account for the requirement of an overt definite article in (346b).

This approach where the availability of unagreement hinges on the overtness of D leads to problems with languages that have unagreement but no articles (see section 6.1) and the – admittedly exceptional – languages that have unagreement although they do not use overt articles in APCs, in particular the southern Italian dialects addressed in section 6.4.2. Possibly most problematically, there also seems to be no way of modelling quantificational unagreement in Choi's system, since many quantificational contexts exclude overt articles

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and probably are non-definite in the first place, as already noted in chapter 4 section 4.1.1 and further detailed in section 6.3.3. An account of unagreement that relies solely on the overtness of a definite D head as a licenser can probably not account for the occurrence of unagreement in such contexts.

To conclude this discussion of hidden feature approaches of unagreement, the analysis sketched briefly by Stavrou (1995: 236f., fn. 33) suggests that the structure of the unagreeing subject in (347a) is something like (347b).

- (347) a. Oi kalitechnes agapame ti fysi.
DET.NOM.PL artists love.1PL DET.ACC.SG nature
'We artists love nature.'¹⁰

- b. [DP [D *pro*] [DEFP [DEF oi] [NP kalitechnes]]]

Although she does not detail her assumptions about the nature of *pro* in a head position here, this sketch clearly locates person and definiteness features on separate functional heads in the same *xnP* and thereby reflects a very similar intuition to the analysis proposed for languages with definite articles in APCs in chapter 4.

6.2.3 Unagreement \neq imposters

Before turning to the analysis of unagreement proposed here, I briefly address a potential alternative approach to unagreement based on Collins & Postal's (2012) concept of imposters. Collins & Postal (2012) – henceforth CP2012 – use the term imposters to describe DPs that control third person verbal agreement, but have first or second person reference, like the English examples in (348).

- (348) a. This reporter is/*am signing off from Madrid, Spain.
b. Nixon is/*am not going to resign.
c. Yours truly is/*am unhappy.
d. Yours truly runs/*run in the morning.
e. Is/*Are Madam not feeling well?
f. Is/*Are the general going to dine in his suite? Collins & Postal 2012: 3, (5)

Dudley (2014) proposes an analysis of Spanish unagreement data as instances of imposters. While I remain agnostic concerning the validity of CP2012's approach to the analysis of

¹⁰Spelling adapted. Stavrou has the more literal translation "the artists we love the nature."

imposters, I argue here that this approach is not applicable to unagreement and that therefore unagreement and imposters should be treated as separate phenomena.¹¹

The next subsection outlines the guiding ideas of CP2012's analysis of imposters and section 6.2.3.2 argues for a clear distinction between unagreement and imposters.

6.2.3.1 Imposters

This section provides a very brief overview of the syntactic approach to imposters championed by CP2012 to provide a basis against which to discuss whether unagreement constructions are instances of imposters. CP2012 characterise imposters in terms of a mismatch between notional and grammatical person as in (349). In their terminology, notional person indicates the discourse-referential properties of a DP, i.e. whether it refers to the author of the utterance, the addressee or neither of the discourse participants, while grammatical person determines the behaviour of a DP in relation to grammatical phenomena like subject-verb agreement.

(349) An imposter is a notionally X person DP that is grammatically Y person, $X \neq Y$.

Collins & Postal 2012: 5, (10)

They observe that plural imposters appear to allow variable pronominal agreement, that is, they can apparently serve as antecedents for third and non-third person anaphora. This is illustrated in (350), where a reflexive can agree in person with the grammatical person of the imposter in the case of *themselves*, but also with its notional (first) person in the case of *ourselves*.

(350) In this reply, the present authors₁ (=the writers of the reply) attempt to defend ourselves₁/themselves₁ against the scurrilous charges which have been made.

Collins & Postal 2012: 17, (6b)

Moreover, CP2012 also claim that both types of antecedent agreement can co-occur within the same sentence. This means that given a sentence with two distinct anaphors undergoing pronominal agreement with an imposter, one anaphor may agree with the grammatical person of the imposter and the other one with its notional person. Example (351) illustrates this.¹²

(351) To protect ourselves from getting sued, the present authors will not expose themselves to public questioning.

Collins & Postal 2012: 97, (18)

¹¹This is not to deny that, insofar as unagreement and imposters both involve special behaviour of person features in the nominal domain, it may be possible and desirable to find common underlying factors.

¹²The acceptability of this construction seems to be somewhat contested among native speakers of English. Considering that at least some speakers accept it, CP2012 argue that at least some varieties of English allow such configurations. The immediate antecedent of *ourselves* is PRO, but since PRO is controlled by the imposter the latter is one of the antecedents of the anaphor in CP2012's system.

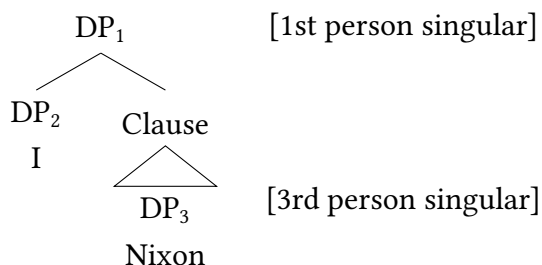
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CP2012 argue against what they call a ‘notional’ approach to imposters that would treat them as “syntactically regular 3rd person DPs with the *semantic/discourse* property that they denote either the speaker(s) [...] or the addressee(s)” (Collins & Postal 2012: 9). The ‘syntactic’ approach they advocate instead holds that the non-third person denotations of imposters, as well as the variability in pronominal agreement, indicate that imposters contain first or second person pronouns in their structure. In particular, they propose that imposters like (352a) are derived from *precursor* structures, characterised as cases of non-restrictive apposition like (352b).

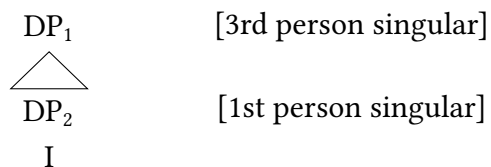
- (352) a. Nixon [=speaker] is/*am not going to resign. *imposter*
 b. I, Nixon, am not going to resign. *precursor*

The non-third person pronouns in precursors are analysed as subjects of a reduced clausal structure with the overt part of the appositive forming the (third person) predicate. The grammatical behaviour of the full structure is determined by the pronominal subject in (353), while the third person features of the predicative noun are too deeply embedded. In imposters, on the other hand, the relation between the third and non-third person features is inverted as in (354). This is meant to account for the fact that the complex DP ends up being grammatically third person.

- (353) Structure of precursor (Collins & Postal 2012: 49, (4))



- (354) Structure of imposter (Collins & Postal 2012: 49, (5))

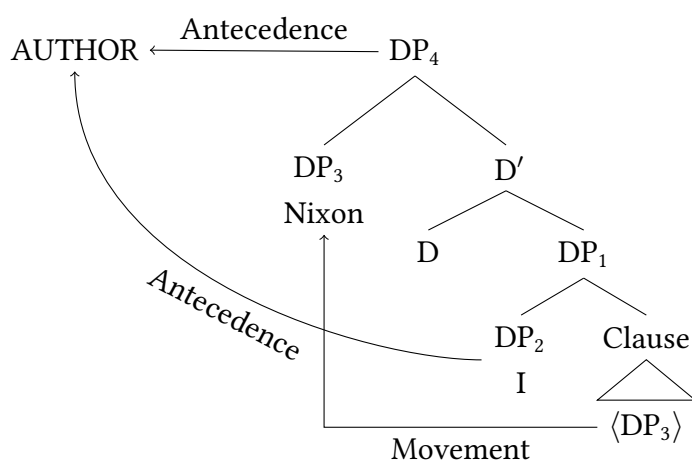


CP2012 assume that speech act participants are syntactically represented in the sentence (either in the left periphery, e.g. Sigurðsson 2004, or as arguments of performative verbs in the sense of Ross 1970) by the null DPs AUTHOR and ADDRESSEE. Pronouns need to have antecedents, and non-third person pronouns ultimately have one of these DPs as their

antecedent. This also applies to imposters as can be seen in a sketch of the derivation of imposter structures in (355). The pronominal subject DP₂ of the precursor structure DP₁ is anteceded by AUTHOR. The third person nominal predicate DP₃ moves across the pronominal subject – possibly undergoing predicate inversion (den Dikken 2006) – and consequently determines the grammatical person of the complex DP₄, since it is the highest DP. However, the antecedent of the complex DP₄ is still AUTHOR, accounting for the notional first person of the imposter.

(355)

Collins 2014b: 7, (13)



Collins & Postal suggest that while pronouns need to agree with an antecedent, they are not restricted to agreeing with their immediate antecedent. So a pronominal whose antecedent is an imposter can agree with the third person of the imposter itself, but it can also agree with its ultimate antecedent, i.e. the null AUTHOR or ADDRESSEE DP. This approach accounts for the variability in pronominal agreement with imposters observed in examples like (350) or (351). I leave aside obvious questions regarding the restriction to the plural, as this short sketch suffices for present purposes. For further details the reader is referred to CP2012 and Collins (2014a).

6.2.3.2 Unagreeing noun phrases are not imposters

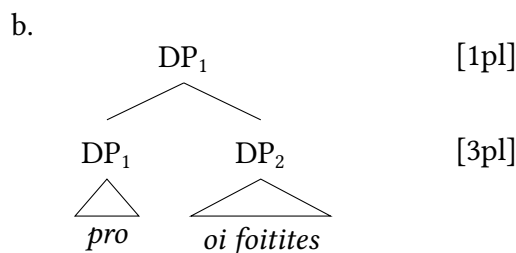
This section aims to show that unagreement should be clearly distinguished from imposters, *pace* Dudley's (2014) treatment of Spanish unagreement constructions as instances of imposters.

Recall that CP2012 characterise imposters as mismatches between notional and grammatical person, see (349). This does not apply to unagreement contexts like the simple example in (356a). The subject DP *oi foitites* 'the students' refers to a set of students that include the speaker, so it is notionally first person. Since the subject also controls first person verbal

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agreement, its grammatical person is likewise first person. Hence, there is no mismatch qualifying this structure as an imposter. If anything, an abstract representation like (356b) resembles that of precursors in (353) with “dominant” non-third person features.

(356) a. Oi foitites diavaz-oume poly. [Greek]
 DET.NOM.PL students study-1PL much
 ‘We students study a lot.’



Considering that appositive analyses of unagreement and dAPCs have been discussed and rejected in section 6.2.2.1 and chapter 4 section 4.1.2, the parallel between precursors and unagreement suggested by (356b) is presumably wrong. The semantic analysis of unagreement and APCs proposed by Höhn (2014b) also suggests that these constructions do not involve two independently referring DPs which are identified, e.g. a *we* set and the set of salient students in (356). Instead, the most succinct analysis seems to be that there is only one complex referring expression denoting the salient set of students and the contribution of person features or an overt pronoun is to introduce a presupposition to the effect that the author is a member of that set. The simplest corresponding syntactic analysis would treat the person features or pronoun as part of the same referring *xnP*. Finally, there is no strong reason to assume that an unagreeing *xnP* contains third person features at all. This points to another empirical reason for distinguishing unagreement from imposters.

CP2012 observe that English APCs like (357) crucially differ from imposter constructions in that they only allow pronominal agreement with their ‘notional person’, but not with any hypothetical third person features of the noun *dancers*.¹³

(357) We dancers₁ need to keep ourselves₁/*themselves₁ in good shape.

Collins & Postal (2012: ch. 1, fn. 6)

The same holds for unagreeing subjects as shown by the Greek examples in (358). The unagreeing subject in (358a) controls first person agreement, but also requires first person pronominal agreement. A third person reflexive is ungrammatical in this context. The oppo-

¹³Of course, on the analysis defended in this thesis there is no reason to assume that *dancers* carries any distinct third person features in (357).

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site holds in (358b) where the subject controls third person agreement and rules out non-third person pronominal agreement.

- (358) a. Oi foitites_i frontiz-oume ton eaf_{to} mas_i/*tous_i. [Greek]
 DET.PL students care.for-1PL DET.SG self 1PL.POSS/3PL.POSS
 ‘We students care for ourselves.’
- b. Oi foitites_i frontiz-oun ton eaf_{to} *mas_i/tous_i.
 DET.PL students care.for-3PL DET.SG self 1PL.POSS/3PL.POSS
 ‘The students care for themselves.’

Similar observations hold for Spanish as illustrated in (359), where the subject *los estudiantes* cannot be coindexed with a third person clitic *los* ‘them’ in a first person unagreement context (359a), but only with the first person clitic *nos* ‘us’ (359b).

- (359) a. * [Los estudiantes]_i salimos de la reunión [Spanish]
 the students_i left.1PL from the meeting
 después de que los_i acusaran.
 after of that them_i accused.3PL
- b. [Los estudiantes]_i salimos de la reunión después
 the students_i left.1PL from the meeting after
 de que nos_i acusaran.
 of that us_i accused.3PL
 ‘We students left from the meeting after they accused us.’

after Ordóñez & Treviño 1999: 59, (71) quoting Olarrea 1994

A similar argument against treating unagreeing subjects as grammatically third person comes from *xnP*-internal anaphora.¹⁴ The reflexive inside the subject *xnP* has to agree in person with the main predicate in (360), so again there must not be a mismatch between grammatical and notional person.

- (360) a. [Oi anasfaleis gia ton eaf_{to} mas/*tous] echoume [Greek]
 DET.PL insecure.PL about DET.SG self 1PL.POSS/3PL.POSS have.1PL
 dyskoli zoi.
 difficult life
 ‘We who are insecure about ourselves have a difficult life.’

¹⁴Thanks to Jonathan Bobaljik for suggesting this type of data.

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- b. [Oi anasfaleis gia ton eafto *mas/tous] echoun dyskoli
DET.PL insecure.PL about DET.SG self 1PL.POSS/3PL.POSS have.3PL difficult
zoi.
life
'Those who are insecure about themselves have a difficult life.'

If unagreeing subjects cannot display a mismatch between notional and grammatical person through pronominal agreement, CP2012's argument for assuming two distinct sets of person features in imposters is inapplicable and there is no reason to assume that an unagreeing xnP contains any third person features.

To conclude this discussion with a potential example of a Greek imposter, consider the minimally contrasting examples in (361). The one in (361a) is simply a case of unagreement, where the subject is notionally and grammatically first person. The subject in (360b), on the other hand, may be a real imposter. It is grammatically third person, but refers to the authors of the utterance, making it notionally first person. Since pronominal agreement is restricted to the grammatical person of this expression, a notional account of imposters may be preferable to a syntactic one in this case. In any case, this is clearly not an instance of unagreement.

- (361) a. Oi ypofainomenoi_i ypostiriz-oume ta dikaiomata mas_i/*tous_i.
DET.PL present.people assert-1PL DET.PL rights 1PL.POSS/3PL.POSS
'The undersigned assert our rights.'
- b. Oi ypofainomenoi_i ypostiriz-oun ta dikaiomata *mas_i/tous_i.
DET.PL undersigned assert-3PL DET.PL rights 1PL.POSS/3PL.POSS
'The undersigned assert their rights.'

In her discussion of what she terms imposters in Spanish, Dudley (2014: 54) notes data of the type in (360), but in contrast to the view advocated here, suggests that they exemplify specific properties of imposters in Spanish. While crosslinguistic research into imposter constructions as the papers collected in Collins (2014a) may well necessitate modifications to CP2012's original analysis of imposters, I hope to have shown that unagreement is appreciably different from imposters and that treating it as a type of imposter unnecessarily introduces terminological confusion by hiding these empirical differences.

6.3 Proposed analysis

This section develops a hidden feature analysis of unagreement that relates the crosslinguistic variation of unagreement to the variation in the syntactic locus of person features. Section 6.3.1 presents the crosslinguistic generalisation at the heart of the analysis of unagreement detailed in section 6.3.2. Quantificational unagreement, already briefly discussed in chapter 4, is addressed in section 6.3.3 and section 6.3.4 deals with the occurrence of unagreement in object positions.

As mentioned in section 6.1, the analysis focuses on the languages with overt articles mentioned there. For some discussion of the predictions of the proposal regarding other languages surveyed in chapter 2 see section 6.4 below.

6.3.1 Crosslinguistic generalisation on unagreement

In section 6.1 I proposed that one of the conditions for unagreement is the availability of consistent pro-drop, a hypothesis shared by Choi (2014b).¹⁵ Here I propose that there is also a correlation between the occurrence of definite articles in APCs and the availability of unagreement as stated in the generalisation in (362).¹⁶

- (362) Consistent null subject languages with definite articles
- a. show unagreement if they have a definite article in APCs, and
 - b. do not show unagreement if they have no definite article in APCs.

The second part of the generalisation seems to hold for the null subject languages without unagreement presented in section 6.1. As seen in (363), APCs in these languages are in complementary distribution with the definite article. In that respect they parallel English-type pronominal determiners, so it seems plausible to assume the classical analysis presented in chapter 1 and sketched here in (364).¹⁷ For current purposes, the categorial, gender and number features do not play a special role apart from assuring structural coherence of the *xnP* and congruence of gender and number features (see chapter 1).

¹⁵In light of the object unagreement data discussed in section 6.3.4, this condition may be more appropriately formulated in terms of the existence of an overtly agreeing ϕ -probe for the unagreeing *xnP*, or identifiability in the sense of Rizzi (1982). This depends on the analysis assumed for phenomena like clitic doubling and I leave the specifics open at this point.

¹⁶Notice that this generalisation only applies to languages with definite articles. See section 6.2.2.2 for Choi's (2014b) very similar generalisation.

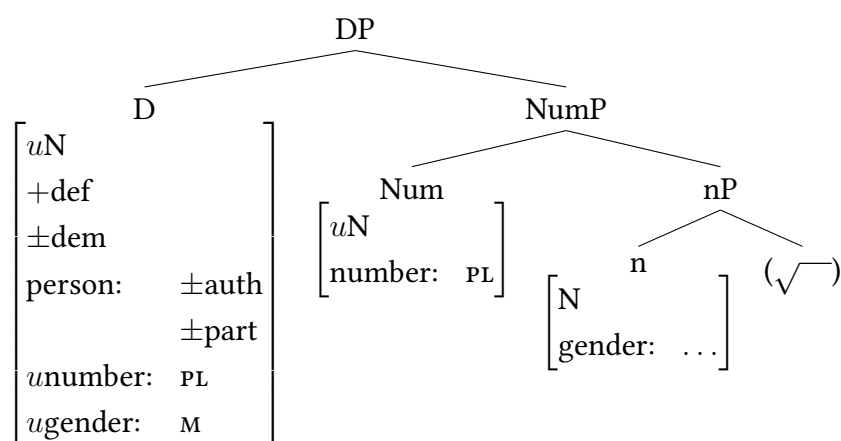
¹⁷But see chapter 3 for discussion of Hungarian.

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(363) *Languages without unagreement*

noi	(*gli)	studenti	[Italian]
nós	(*os)	estudantes	[European Portuguese]
mi	(*a)	diákok	[Hungarian]
we	DET.PL	students	

(364) Pronominal determiners



The data in (365) show that the languages with definite articles and unagreement presented in section 6.1 have dAPCs in line with the generalisation (362a). There is variation as to whether definiteness is marked by an article or by a nominal suffix, which I take to be secondary to the main issue here. In chapter 4, I proposed the xnP-structure in (366) for such dAPCs.

(365) *Languages with unagreement*

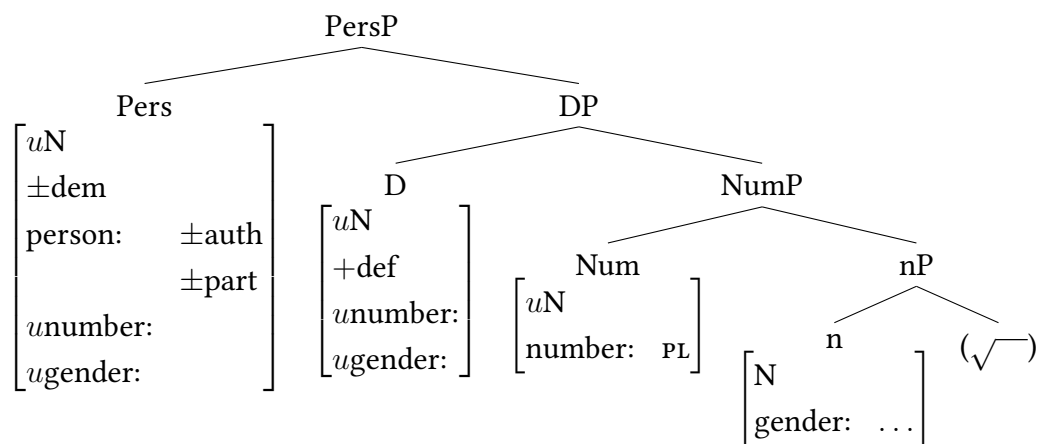
a. *Definite articles*

emeis	oi	foitites	[Greek]
nosotros	los	estudiantes	[Spanish]
nosaltres	els	estudiants	[Catalan]
nos	os	estudantes	[Galician]
we	DET.PL	students	

b. *Definiteness suffixes*

nie	studenti- te	[Bulgarian]
nuuje	örendjieve- so	[Pomak]
we	students-DET.PL	
noi	pikurar- li	[Aromanian]
we	shepherds-DET.PL	

(366) APCs with definiteness marker (dAPCs)



The next section explains how unagreement is derived from dAPC structures like (366).

6.3.2 Deriving unagreement from dAPCs

This section develops a hidden feature analysis of unagreement (to adopt Ackema & Neeleman's 2013 helpful terminology). The analysis makes crucial use of the late insertion hypothesis of the Distributed Morphology-framework (see chapter 1 and Embick 2010, Halle & Marantz 1993, Harley & Noyer 1999): functional heads contain no phonological matrix until after spell-out, when vocabulary insertion takes place.

The essence of a hidden feature analysis of unagreement is that the apparently unagreeing subject DP actually carries the ϕ -features reflected by the verbal agreement morphology. Thereby, they mirror the view taken on APCs in this thesis, and particularly the pronominal determiner analysis of languages like English and Italian summarised in chapter 1 section 1.2.3 and the dAPC structures first discussed in chapter 4. For further support of this parallel consider (367). In an afterthought or self-correction context, an appositive first plural pronoun may clarify that the author of the utterance is a member of the group denoted by the subject.

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- (367) Stenachorethikan oi foitites, (diladi) emeis, gia afto. [Greek]
worried.3PL DET.NOM.PL students namely we for DEM.ACC.SG
'The students, (namely) us/we, got worried about this.'

In contrast, in both the APC in (368) and the unagreement construction in (369) such an apposition is infelicitous. This is easily explained if the subject DP already encodes the author's membership in its denotation in both cases, making the apposition redundant.

- (368) #Stenachorethikame emeis oi foitites, (diladi) emeis, gia afto.
worried.1PL we DET.NOM.PL students namely we for DEM.ACC.SG
'We students, (namely) us, got worried about this.'

- (369) #Stenachorethikame oi foitites, (diladi) emeis, gia afto.
worried.1PL DET.NOM.PL students namely we for DEM.ACC.SG
'We students, (namely) us, got worried about this.'

Moreover, in accordance with the number asymmetry crosslinguistically observed for APCs (see chapter 2 section 2.6.2 and chapter 5 section 5.3), unagreement seems to be most readily available in the plural. Spanish rules out singular unagreement altogether, with regular nouns (370a) as well as epithets (370b).

- (370) a. *El estudiante trabajé muchas horas ayer. [Spanish]
the student worked.1SG many hours yesterday
b. *El imbécil no compré/compraste los tomates.
the idiot NEG bought.1/2SG the tomatoes
intended: 'I/you idiot didn't buy the tomatoes.'

Greek also shows a general preference for plural unagreement, although it also seems to have some cases of singular unagreement and APCs. These and potential parallels to German singular APCs are discussed in the appendix of Höhn (2016).

In section 6.1 I have identified pro-drop as a necessary condition for unagreement. It seems a reasonable hypothesis, then, that unagreement relates to APCs like a "dropped" pronoun relates to an overt one. On the present analysis that means that the functional head encoding person features in APCs is not spelled out in unagreement. But what determines this difference between APCs and unagreement? I will suggest here that demonstrativity – or deicticity – plays a central role.

In null subject languages, the use of overt pronouns is typically associated with emphasis. The same appears to hold for the use of APC constructions over unagreement, cf. de Bruyne's (1995, 145) comment on cases of unagreement in Spanish noting that "the use of the subject

pronouns [i.e., an APC; GFKH] would have an emphatic effect.” I propose that this notion of emphasis can be related to a demonstrative feature on the overt pronoun in APCs of unagreement languages.

A relation between APCs and demonstratives has been pointed out for English by Sommerstein (1972: 204) based on example (371a) from Postal (1969: 219). Sommerstein suggests that this sentence, probably with stress on *you*, can only be reported using a demonstrative as in (371b), but not with a plain definite article as in (371c).

- (371) a. You troops will embark but the other troops will remain.
 b. He said that those troops would embark but the other troops would remain.
felicitous paraphrase
 c. He said that the troops would embark but the other troops would remain.
infelicitous paraphrase

This suggests that English pronominal determiners can correspond to demonstratives, not only to definite articles. Against this background, Rauh (2003: 415-418) proposes that stressed pronominal determiners in German and English carry a [demonstrative] feature, while unstressed ones, which pattern with definite articles, lack this property.

Now consider the Greek example (372) where some out of a larger group of pupils are sent on a tour, while the complement set are told that they can leave. Here, the adnominal pronoun is obligatory in order to establish a complement set of pupils. Notice that the second occurrence of *mathites* ‘pupils’ is preferably elided, but is included here to stress that the relevant interpretation is one where the group of ‘others’ consists of other pupils (rather than of non-pupils, in which case the adnominal pronoun would be optional). In parallel to the English example above, reporting this utterance also requires the use of a demonstrative (373).

- (372) *(Eseis) oi mathites tha pate ekdromi kai oi ypoloipoi
 you.PL DET.NOM.PL pupils FUT go.2PL tour and DET.NOM.PL remaining
 (mathites) mporoun na fygoun.
 pupils can.3PL SBJV leave.3PL
 ‘You pupils will go on a tour and the other pupils can leave.’

- (373) Eipe oti *(aftoi) oi mathites tha pane ekdromi, eno
 said.3SG that DEM.PL DET.NOM.PL pupils FUT go.3PL tour whereas
 oi ypolypoi (mathites) mporoun na fygoun.
 DET.NOM.PL remaining pupils can.3PL SBJV leave.3PL
 ‘She said that these pupils will go on a tour whereas the remaining pupils can leave.’

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Against this background, I propose that unagreement corresponds to a pronominal determiner construction with unstressed pronoun in lacking a demonstrative feature, and dAPCs form the stressed counterpart by virtue of being demonstrative. Adapting Rauh's (2003) proposal, the observable alternation in reported speech suggests that pronouns and demonstratives form a class.

There are two further pieces of evidence in favour of this view. First, demonstratives are in complementary distribution with adnominal pronouns (see also Blake 2001 and chapter 7). This holds for English-type pronominal determiners (**these we/us linguists*) as well as Greek or Spanish dAPCs:

(374) (*aftoi) emeis (*aftoi) oi glossologoi (*aftoi) [Greek]
 DEM.PL we DET.NOM.PL linguists
 'we linguists'

(375) (*esos) nosotros (*esos) los lingüistas (*esos) [Spanish]
 DEM.PL we DET.PL linguists
 'we linguists'

Second, APCs and DPs containing a demonstrative each enforce a different, specific verbal agreement corresponding to their feature specification, i.e. they both block unagreement as illustrated for Greek in (376).

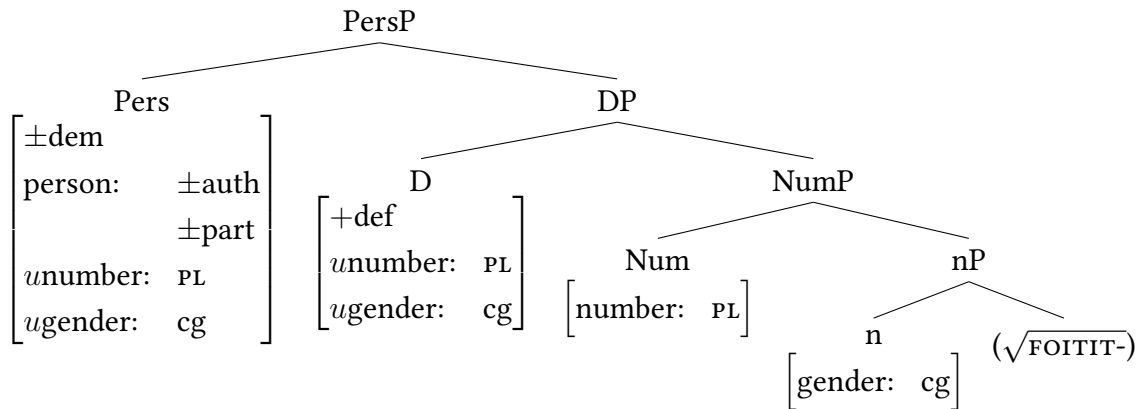
- (376) a. Emeis oi odigoi de tha pioume/*pieite/*pioune.
 we DET.NOM.PL drivers NEG FUT drink.1PL/2PL/3PL
only: 'We drivers won't drink.'
- b. Eseis oi odigoi de tha *pioume/pieite/*pioune.
 you DET.NOM.PL drivers NEG FUT drink.1PL/2PL/3PL
only: 'You drivers won't drink.'
- c. Aftoi oi odigoi de tha *pioume/*pieite/pioune.
 these DET.NOM.PL drivers NEG FUT drink.1PL/2PL/3PL
only: 'These drivers won't drink.'

These observations suggest that deictic demonstratives are third person variants of adnominal pronouns and therefore realise the same head Pers, as illustrated in (377).¹⁸ For

¹⁸On this view, one could entertain the hypothesis that postnominal anaphoric demonstratives are derived by movement of DP to Spec,PersP. Such an analysis offers a potential account for why in Spanish the definite article shows up with postnominal, but not prenominal demonstratives (*estos (*los) estudiantes* vs. **(los) estudiantes estos* 'these students'). Assuming that its absence with prenominal demonstratives is due to a morpho-phonological

concreteness, I assume here that demonstrativity is represented by a binary feature $[\pm\text{dem}]$ on Pers and will make crucial use of both feature values. The notation $[uF: \text{Val}]$ is used for convenience in order to indicate the initially unvalued, i.e. probing, features modelling xnP internal number and gender agreement. It is not intended as a commitment to a distinction between interpretable and uninterpretable unvalued features. For ease of readability, I omit the interpretable $[N]$ feature on n and the corresponding $[uN]$ features on other heads of the xnP (see chapter 1).

(377)



The Pers and D heads agree for number and gender with the relevant interpretable features inside the xnP . The vocabulary item (VI) corresponding to a $[-\text{dem}]$ Pers head is null in NSLs¹⁹ and underspecified for any ϕ -features, while a $[\text{+dem}]$ specification leads to insertion of the specified forms as sketched in (378). Notice that the null spell-out of Pers is an independent point of variation, so there may be non-NSLs with the structure in (377).²⁰

- (378) Pers $[-\text{dem}]$ \leftrightarrow \emptyset
 Pers $[\text{+auth}, \text{+part}, \text{pl}, \text{+dem}]$ \leftrightarrow *emeis*
 Pers $[-\text{auth}, -\text{part}, \text{pl}, \text{masc}, \text{+dem}]$ \leftrightarrow *aftoi*

This accounts for the lack of unagreement with APCs and demonstratives insofar as they are the $[\text{+dem}]$ counterparts to otherwise syntactically identical unagreeing noun phrases.

Furthermore, the proposal predicts that unagreement is not a feature of a language *per se*, but results from the spell-out possibilities facilitated by the structural configuration of dAPCs. If a null subject language expresses definiteness and person separately in some cases only, those cases should allow unagreement. This is borne out as discussed in section 6.2.1 for

linear adjacency effect between Pers and D, movement of DP would bleed the necessary structure for this effect to apply.

¹⁹Some additional provision is needed to restrict this effect to positions that are ϕ -identified by a probe, cf. e.g. Roberts & Holmberg (2010), to prevent overgeneration of null Pers heads.

²⁰French may be an example (*nous les étudiants* ‘we students’), cf. footnote 5 and Höhn 2016.

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European Portuguese, which exceptionally shows unagreement effects with numerals. In the current account, this is expected since as discussed there numerals in APCs seem to trigger the need for definite articles in Portuguese APCs.

Before I go on to discuss the absence of unagreement in languages like Italian, the following two subsections will deal with two further predictions of the proposed account. The first one concerns quantificational unagreement and the second one the fact that if unagreement is traced to properties of the nominal domain, it should be detectable in other instances of verbal agreement such as object agreement or clitic doubling.

6.3.3 Quantificational unagreement and [-dem]

The fact that quantificational unagreement configurations (see chapter 4 section 4.1.1) do not have counterparts with overt pronouns seems to undermine the correlation between APCs and unagreement. Ackema & Neeleman (2013) identify this as a problem for appositional and hidden feature accounts of unagreement, which are built on this correlation. The present account, however, actually predicts this pattern.

The quantificational unagreement configuration in (379) is ungrammatical with an overt pronoun, but well-formed in its absence. Verbal agreement is for first person plural, indicating that the agreement controller, the subject, contains the corresponding person features.

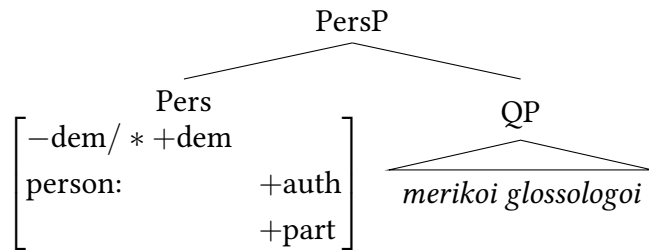
- (379) (*Emeis) merikoi mathites tha pame ekdromi.
we some students FUT go.1PL trip
'Some of us students will go on a trip.'

Let us assume that [\pm dem] is indeed connected to demonstrativity as suggested in section 6.3.2 with reference to Rauh's (2003) [demonstrative] feature. It seems plausible that definite reference is a precondition for demonstrativity/deicticity and that quantified phrases as in (379) do not involve definite reference.²¹ Consequently, they cannot sustain a [+dem] feature either, cf. (380). Since only [+dem] Pers receives overt spell-out, overt pronouns are consequently ruled out in this configuration.²²

²¹Ackema & Neeleman's (2013) contrast between "quantificational" and the simple "referential" unagreement is presumably based on exactly this property.

²²A potential, albeit limited, correlate of these considerations is the overall absence of determiners with these kinds of quantifiers in Greek. Against this background, the somewhat unexpected obligatory definite article in *oi perissoteroi* 'most' deserves further attention.

(380)



Numerals of the type *emeis oi dyo mathites* ‘we (the) two pupils’, where Pers can receive an overt spell-out, do not constitute an exception, but rather underline the role demonstrativity plays in this context. They involve a definite DP denoting a specific set of people with the cardinality indicated by the numeral. Their behaviour contrasts with that of numeral quantifiers, which do not involve an article and cannot sustain overt pronouns: **emeis dyo mathites* ‘we two pupils’. Consider the contrast between (381a) and (381b).

- (381) a. Tha pame emeis oi dyo mathites s-ton diefthynti kai
 FUT find.1PL we DET.NOM.PL two pupils to-DET.ACC.SG principal and
 treis mathites tha perimen-(*oume)/oun edo ton ypodiefthynti.
 three students FUT await.1PL/3PL here DET.ACC.SG vice-principal
 ‘We two pupils will find the principal and three pupils will wait here for the vice-principal.’
- b. Tha pame dyo mathites s-ton diefthynti kai treis mathites tha
 FUT find.1PL two pupils to-DET.ACC.SG principal and three students FUT
 perimen-oume/oun edo ton ypodiefthynti.
 await.1PL/3PL here DET.ACC.SG vice-principal
 ‘Two (of us) pupils will find the principal and three (of us) pupils will wait here for the vice-principal.’

Both sentences are fine if the second clause uses third person agreement, but they differ with respect to the availability of first person unagreement in the second clause. In (381a), thanks to its [+dem] specification the subject APC of the first clause exhaustively refers to a specific group of two pupils which includes the speaker.²³ The subject of the second clause invokes a set of three pupils conceptualised as a distinct group. First person unagreement is ruled out in the second clause, presumably because it would require the speaker to simultaneously be a member of two groups conceptualised as distinct, the pupils looking for the principal and the pupils waiting for the vice-principal.

²³For discussion of the basic semantics of APCs and “plain” definite unagreement see Höhn (2014b).

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That this mutual exclusivity is due to the [+dem] APC in (381a) is suggested by the fact that this restriction disappears in (381b), where the subject of the first clause is not an APC, and hence by assumption not [+dem]. Here, both the first and the second clause may contain first person quantificational unagreement. This utterance would be felicitous in debate of a group of at least five pupils about how to distribute the tasks of finding the principal and waiting for the vice-principal. The speaker introduces two subsets of the set of pupils without committing herself to participation in one particular task (possibly because it has not been decided or is not considered relevant at the moment who does what). Semantically, the first person presupposition seems to apply to the restrictor of the quantifier, the contextually salient set of *mathites* ‘pupils’, which is identical between the subjects of the first and second clause, so the speaker needs to be a member of the overall set of pupils. However, there is no presupposition as to which – if indeed any – of the subgroups the speaker is assigned to, so that (381b) does not give rise to the contradictory requirement for the speaker to both go to the principal and wait for the vice-principal. Indeed, sentence (381b) could be used felicitously in a context where the task assignment has not taken place and there are more than five pupils, so that the task assignment is not exhaustive. In this case, the speaker may not end up with either of the two tasks mentioned in (381b).²⁴

Finally, floating quantifiers are more permissive than the remaining quantifiers with respect to the realisation of Pers. The Greek and Spanish sentences in (382) both allow an overt person marker or an unagreement construction.

- (382) a. (Emeis) oi foitites pigame oloi ekdromi.
we DET.NOM.PL students went.1PL all trip
‘All of us students went on a trip.’/‘We students all went on a trip.’
- b. (Nosotros) los estudiantes vamos todos a la playa.
we the students go.1PL all to the beach
‘All of us students go to the beach.’/‘We students all go to the beach.’

This suggests that the basic account for unagreement proposed in section 6.3.2 also extends to the floating quantifiers. The restrictor of the quantifier is a regular PersP and the overt realisation of Pers is supported by a definite article in these expressions, in contrast to the types of quantifiers discussed above.

²⁴Typically, quantifier unagreement will, of course, give rise to the interpretation that the speaker is involved in the event denoted by the scope of the quantifier as well. Given the observations in the main text, this is likely due to pragmatic effects, i.e. it would be uncooperative to use first rather than third person agreement to denote a set of individuals not containing the speaker outside the special contexts introduced in examples like (381b).

6.3.4 Object unagreement

While most discussions of unagreement are concerned with subjects, similar configurations are possible with (apparent) person mismatches between objects and object clitics or verbal agreement markers, too. A Spanish example of this sort is (383a), where the first person plural clitic *nos* is coreferent with the indirect object *a los familiares* ‘to the relatives’. The Bulgarian example in (383b) displays the same effect, where the direct object *studentite* ‘the students’ is doubled by a second person plural clitic. For similar examples from Greek see Höhn (2016).

- (383) a. La policia nos dio a los familiares las [Spanish]
 the police CL.1PL gave to the.PL relatives the.PL
 malas noticias.
 bad.PL news.PL
 ‘The police gave us relatives the bad news.’
- b. Včera vi vidjax studenti-te v ofisa. [Bulgarian]
 yesterday CL.2.PL saw.1SG students-the in office
 ‘Yesterday, I saw you students in the office.’

Note that the Spanish example in (383a) involves doubling of an indirect object. Usually only certain southern American varieties of Spanish (Rio-Platense) allow clitic doubling of non-pronominal direct objects, but all varieties require doubling of both direct and indirect pronominal objects. Strikingly, in object unagreement contexts like (384) the doubling of direct objects is allowed even in Peninsular Spanish. This suggests that the object xnP shares some relevant property with pronouns, as expected on the current proposal, where the xnP carries (non-third) person features.

- (384) Nos denunciaron a las mujeres. [Spanish]
 CL.1PL denounced.3PL to the.PL women
 ‘They denounced us women.’ Hurtado 1985: 202, (20a)

Independently of clitic doubling, object unagreement can also be found in cases that more clearly involve object agreement, cf. the Georgian example in (385) due to George Hewitt and Léa Nash (p.c.).

- (385) (Tkven čven) utsxoel-eb-s ra-s mo-gv-ts-em-t. [Georgian]
 you.PL us foreigner-PL-DAT what-DAT PREV-US-give-THEMATIC-PL
 ‘What will you(pl) give us foreigners?’

These instances of object unagreement do not come as a surprise under the present analysis. As far as languages with object agreement are concerned, a probe with unvalued ϕ -

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features agrees with the features encoded within the object xnP , just as in subject unagreement and the same considerations as above apply. Under an analysis of clitic doubling as a form of object agreement (e.g. Franco 2000, Sportiche 1996), nothing more needs to be said.

An alternative line of research (e.g. Papangeli 2000, Uriagereka 1995) analyses pronominal clitics as determiners, suggesting that they head an argument DP. These D heads receive a theta-role from the verb and eventually head-adjoin to the verb, accounting for their clitic properties. Clitic doubling is explained in terms of a “big DP”, where the doubled DP is located either in the specifier of the clitic determiner (Uriagereka 1995) or in its complement (Papangeli 2000).

The big DP hypothesis raises some questions as to whether first and second person clitics in unagreement languages start out in Pers instead of D, in which case we would actually be dealing with a big PersP, or whether they are special D heads with unvalued ϕ -features that agree with those in the doubled object. The common argument for the big DP hypothesis from the parallels in form between articles and third person clitics seems to favour the latter view, as does the fact that in the present discussion Pers has so far only been taken to spell out full rather than clitic pronouns.²⁵ In this case, the clitic D head simply agrees with the ϕ -features of the xnP in its specifier or complement, while the Pers features in that xnP can remain silent as discussed.

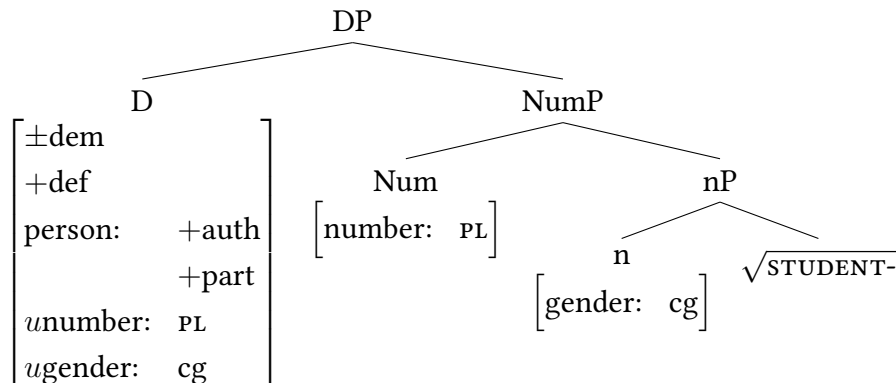
6.3.5 Pronominal determiners and the lack of unagreement

I now turn to the absence of unagreement in languages with pronominal determiner-type APCs, focusing on the example of Italian. Adopting the $[\pm dem]$ feature yields the structure in (386) for the xnP of pronominal determiner-type APCs.

²⁵An empirical argument against attempts to reduce object unagreement to a configuration where the Pers head in a simple xnP head-adjoins to the verb as a clitic comes from the fact that a clitic doubled argument can also be a full APC, cf. the optional presence of the full pronoun in (i).

- (i) Sas katalavaino (esas) tous foitites pou thelete diakopes. [Greek]
CL.2PL understand.1SG you.PL DET.ACC.PL students that want.2PL holidays
'I understand you students for wanting holidays.'

(386)



As discussed in sections 6.1 and 6.3.1, Italian lacks the typical unagreement configuration. Given (386), there appear to be two potential ways an unagreement-like configuration could be derived in principle. Realising D by the definite article would yield the string-equivalent of the Greek-type unagreement construction with a definite plural noun phrase and non-third person verbal agreement, triggered by the [+auth,+part] features. This is ungrammatical as shown earlier and a pronominal determiner is mandatory instead, see (387). Alternatively, the head bearing person features might receive zero spell-out in parallel to the analysis of unagreement in section 6.3.2. On the basis of (386) this would predict a bare definite subject, which is also ungrammatical as shown in (388). I discuss the failure of both options of deriving unagreement in turn.

(387) Noi/ *gli studenti lavoriamo molto. [Italian]
 we the.PL students work.1PL much
 ‘We students work a lot.’

(388) *Studenti lavoriamo molto.
 students work.1PL much
 intended: ‘We students work a lot.’

The fact that definiteness and person are encoded on the same head in the structure in (386) is crucial for understanding the data in (387). In this configuration, the definite article and pronominal determiners are competing for insertion into the same node, deriving the facts in (387) as follows.

As pointed out in the discussion surrounding the English example (371c) in section 6.3.2, pronominal determiners can correspond not only to definite articles, but also to demonstratives. The same holds for Italian as shown in (389). In order to report an utterance contrasting

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two groups of students, one of which contains the speaker like in (389a), a demonstrative needs to be used in place of the pronominal determiner, cf. (389b).²⁶

- (389) a. Noi studenti andremo al cinema e gli altri (studenti) andranno a casa.
we students go.1PL to.the cinema and the other students will.go.3PL to home
'We students will go to the cinema and the other students will go home.'
- b. Dice che (questi/ *gli) studenti andranno al cinema e gli altri said.3SG that these the students go.3PL to.the cinema and the other (studenti) andranno a casa.
students will.go.3PL to home
'She said that (these/*the) students will go to the cinema and the other students will go home.'

In most contexts where the definite article can be used to report a pronominal determiner, demonstratives may be used as well. However, generic contexts like an Italian student mentioning (390a) provide a testing case. In order to report this utterance, someone who is not a student has to use the definite article rather than a demonstrative in place of the pronominal as shown in (390b).

- (390) a. Noi studenti italiani pensiamo che i professori lavorino molto.
we students Italian believe.1PL that the professors work.3PL much
'We Italian students believe that the professors work a lot.'
- b. Dice che (*questi/ gli) studenti italiani pensano che i professori said.3SG that these the students Italian believe.3PL that the professors lavorino molto.
work.3PL much
'She said that (*these/the) Italian students believe that the professors work a lot.'

From these observations I conclude that pronominal determiners can correspond to both definite articles and demonstratives in Italian, too, and that the VI *noi* is underspecified for [\pm dem]. Following Postal's (1969) insights, the definite article is treated as third person, i.e.

²⁶In order for the demonstrative to be mandatory in the reported sentence, the contrast should be between two subgroups of students, rather than between a group of students and another one of non-students. In order to indicate the required interpretation, the second occurrence of *studenti* 'students' is included in brackets, although it would normally undergo nominal ellipsis.

[-auth,-part]. Abstracting from the phonological conditions governing the use of *gli* vs. *i* for the definite article, I assume the VIs in (391).

- (391) D[+auth,+part,+def,pl] ↔ *noi*
 D[-part,+def,pl,masc] ↔ *i/gli*

In an APC like (386) D is syntactically specified as [+auth,+part]. Consequently, the VI of the definite article *i/gli* cannot be inserted as it is specified as [-auth,-part].²⁷ Instead, the properly specified *noi* wins, yielding the grammatical version of (387).

The second ungrammatical option of deriving unagreement, in (388), predicts that a bare plural can be a definite and unagreeing subject. However, in Italian and other Romance languages bare plurals cannot be definite and are, moreover, generally ruled out in subject position (see e.g. Chierchia 1998, Longobardi 1994). So whatever rules out bare definites in Italian in general, rules them out in unagreement contexts. See Höhn (2016) for a discussion of a morphologically-based analysis of null subjects applicable to both pronominal determiner-based x_NP_s like in Italian and dAPC-based x_NP_s as in Greek.

Klaus Abels (p.c.) points out that this view seems to retain the possibility of unagreement with bare nouns in languages with a freer distribution of bare nouns. This is not a bad result considering that languages like Swahili and Georgian appear to indeed allow unagreement, cf. section 6.1. I leave open the question as to why some other languages that allow definite interpretations of bare nouns (Turkish, Bosnian-Croatian-Montenegrin-Serbian) do not allow unagreement. From the present perspective, the most attractive hypothesis would be that this variation also relates to a difference in the x_NP-structure of these classes of languages. Article-less languages with unagreement might encode person in an independent position like Pers, while languages lacking unagreement might encode person on D or a similar position.

6.4 Predictions right and wrong

In this section, I assess how the account for unagreement advocated above fares with respect to the languages discussed in chapter 2. The basic generalisation presented in section 6.3.1 is repeated below.

²⁷If it were underspecified for person features, on the other hand, the subset principle (Halle 1997, Harley & Noyer 1999) would trigger insertion of the most specific VI for a given node. Hence, the more specific *noi* should also be inserted. Note that on this view something would need to be said about the absence of gender specification in VI for the pronominal determiner.

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- (392) Consistent null subject languages with definite articles
- a. show unagreement if they have a definite article in APCs, and
 - b. do not show unagreement if they have no definite article in APCs.

This leaves two ways in which the predictions can go wrong:

- (393) *Two ways in which the unagreement generalisation can go wrong:*
- a. A language has both consistent pro-drop and dAPCs, but lacks unagreement.
 - b. A consistent-pro drop language with articles lacks dAPCs, but still has unagreement.

In the absence of a comprehensive list of languages with unagreement, violations of type (393b) are not easily identified. However, two potential cases are briefly presented in section 6.4.2. Below, I compare the predictions in (392) with the data from languages with dAPCs from chapter 2 section 2.4.2 and chapter 4 as a way of finding violations of type (393a), which will be addressed in section 6.4.1. The relevant languages are listed in (394) and (395).

- (394) *Languages with obligatory articles in APCs (dAPCs)*

- a. *Unagreement correctly predicted:*
 - Spanish
 - Galician
 - Catalan
 - Greek
 - Calabrian Greek
 - Bulgarian
 - Pomak
 - Aromanian
- b. *Lack of unagreement predicted, status unclear:*
 - Mupun
 - Koromfe
 - Maori
 - Tuvaluan
- c. *Unagreement probably correctly predicted:*
 - Abkhaz
- d. *Unagreement (probably) wrongly predicted:*
 - Gulf Arabic
 - Colloquial Egyptian Arabic

Maltese

Romanian

(395) *Languages with optional articles in APCs*a. *Lack of unagreement predicted*

Western Pantar

Wersing

Kamang

b. *Unclear predictions:*

Hausa

The languages in (394a) have been discussed above and are in line with predictions. The languages in (394b) and (395a) lack the verbal agreement marking indicative of consistent pro-drop, so although their xnP structure may satisfy one condition for unagreement, they are not expected to show the phenomenon. I have not yet been able to verify this with native speakers.

Abkhaz in (395c), on the other hand, has dAPCs and allows pro-drop, so it is expected to show unagreement. The example of object unagreement in (396), kindly provided by George Hewitt (p.c.), suggests that this prediction may be borne out.

(396) (shWara hara) a-tW'yim-waa jy-ha-shW-ta-wa-j? [Abkhaz]
 (you.PL us) the-foreign-folk that.which-us-you.PL-give-DYNAM-what.is.it
 'What will you give us foreigners?'

The generalisation in (392) is aimed at languages with mandatory definite articles, so there are no clear predictions for the languages with optional articles in APCs in (395). The languages in (395a) are not expected to show unagreement due to their lack of pro-drop, but Hausa satisfies the pro-drop requirement. Interestingly, it also appears to show unagreement in (397), although that example does not involve the article. As discussed in chapter 2 section 2.4.2.2, the Hausa article is not quite a definite article, but rather a “previous reference marker” (Newman 2000: 143). Consequently, it is possible that the occurrence of unagreement in Hausa is independent of this “article”, so that the language would fall into the group of languages that have unagreement but no definite articles mentioned in section 6.1 (e.g. Swahili, Georgian).

(397) (ku) d'alibai ku-na gasa gurasa. [Hausa]
 you.PL students 2PL-PRS roast cake
 'You students are baking a cake.'

Unagreement

Finally, the group of languages in (394d) has dAPCs and consistent pro-drop, but lacks unagreement. This corresponds to the violation in (393a) and is discussed in the next section. Section 6.4.2 turns to two possible violations of type (393b).

6.4.1 Unexpected lack of unagreement

The Semitic languages in the sample (two Arabic varieties and Maltese) as well as Romanian would be expected to show unagreement, as they have pro-drop and definite articles in APCs. While I have not been able to test this for the Semitic languages in the sample, the prediction seems to be wrong for two other Semitic languages with the same basic properties of pro-drop and dAPCs, namely Lebanese Arabic and Hebrew. As shown in (398), unagreement is not possible in both languages.²⁸

- (398) a. *(Nehna) t-tleemiiz khbaz-na rghiif mbeereh. [Lebanese Arabic]
we the-students baked-1PL loaf yesterday
'We students baked bread yesterday.'
- b. *(Anaxnu) ha-studentim afinu uga gdola. [Hebrew]
we the-students baked.1PL cake big
'We students baked a big cake.'

The same issue arises for Romanian as illustrated in (399).

- (399) Am gatit *(noi) studenți-i o galeata de sarmale. [Romanian]
have cooked we students-DEF.PL a bucket of dumplings
'We students have cooked a bucket of dumplings.'

A possible explanation may be that the dAPCs in these languages do not result from the structures proposed in chapter 4 and in section 6.3 of this chapter, meaning that, despite appearances, definiteness and person features are not structurally distinct in these languages, but encoded on the same head. Tentatively identifying that head as D would mean that these languages actually have pronominal determiners of the English or Italian type. On this view, the definiteness marking in APCs in these languages represents a morphological reflex of definiteness features that are syntactically represented elsewhere in the xnP , i.e. a form of agreement with the definiteness features encoded on D. In the DM framework, effects of this sort have been treated as post-syntactically inserted dissociated morphemes (Embick 1997, Embick & Noyer 2001, Harley & Noyer 1999), which "reflect certain syntactic properties (or

²⁸The lack of unagreement in Hebrew may be connected to the language being a partial null subject language (Borer 1989, Shlonsky 2009, 2014) as claimed by Choi (2014b). This does not explain the lack of unagreement in the other Semitic languages or Romanian, however.

configurations) but do not in any sense contribute these properties to syntax” (Embick & Noyer 2001: 558).

For the Semitic languages, analysing definite articles as morphological exponents of xNP-internal definiteness concord would be in line with observations about so-called definiteness spreading. In Arabic and Hebrew, adjectives modifying a definite noun have to agree with it in definiteness, i.e. the definite article does not only occur attached to the noun but also the adjective, see (400). This supports the hypothesis that definiteness is part of the set of ϕ -features in these languages (Danon 2001, 2008, Fassi-Fehri 1999, Pereltsvaig 2006, Shlonsky 2004).

- (400) a. s-sabi *(z-)zaki [Lebanese Arabic]
 the-boy *(the-)smart
 ‘the smart boy’
- b. ha-yeled *(ha-)xaxam [Hebrew]
 the-boy *(the-)smart
 ‘the smart boy’ Danon 2001: 1074, (2a)

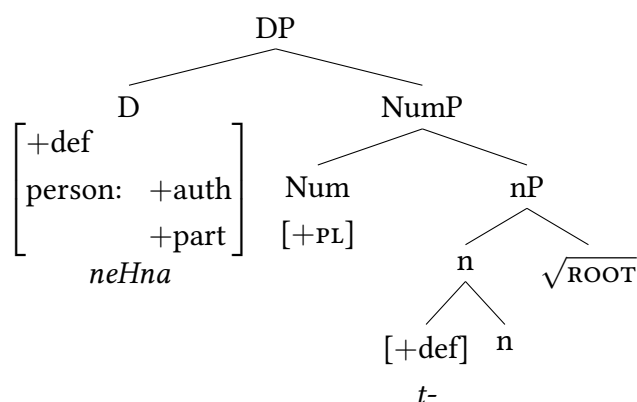
Extending the featural analysis of definiteness marking on adjectives to nouns as well yields a uniform analysis of all instances of the definite article in these languages as dissociated morphemes marking agreement with an abstract [+def] feature in D.²⁹ The structure of an APC after insertion of the dissociated morpheme may then be sketched as in (401), abstracting away from possible roll-up movement, either as phrasal (Shlonsky 2004) or head movement (Pereltsvaig 2006). For illustration, I assume that the dissociated [+def] morpheme on nouns adjoins to n, following Embick & Noyer’s (2001, 583) proposal for the Swedish definite suffix. However, if nouns, i.e. complex $\sqrt{\text{ROOT}}+\text{n}$ heads, consistently raise to Num in the relevant languages, the dissociated [+def] marker may be adjoined to Num instead.

²⁹For the same intuition compare Corbett’s (2006, 135) treatment of definiteness “as a feature value being imposed on the noun phrase as a whole, which may be indicated at more than one point in the phrase.” See also Danon (2010: 145, fn. 1).

Unagreement

(401) *neHna t-tleemiiz* ‘we students’

[Lebanese Arabic]



This yields a pronominal determiner structure like that of Italian, and a similar account for the lack of unagreement would hold if a non-third person D head can only receive null exponence if there is no overt material in its complement.

Romanian does not have the same type of definiteness concord as Hebrew or Arabic, but Nicolae (2015) nonetheless suggests that Romanian patterns with Hebrew and Arabic with respect to Danon’s (2010) definiteness parameter, meaning that definiteness is a morphosyntactic feature in the language. This might allow an analysis of the Romanian article as a dissociated morpheme triggered by an abstract definiteness feature in D. This abstract definiteness feature would plausibly also be present when the D head is realised by an adnominal pronoun, triggering the insertion of the dissociated article morpheme. Such an approach may be developed as a slight modification to Dobrovie-Sorin & Giurgea’s (2006) proposal that the placement of the definite article in Romanian involves a postsyntactic lowering operation (Embick & Noyer 2001), only that it would not be D itself that undergoes lowering, but a dissociated morpheme expressing the definiteness feature of D.³⁰ If Romanian had pronominal determiners, the lack of unagreement could again be captured as above. However, the details of such an account remain to be worked out.

I finish this section with observations from one Arabic variety and one Eastern Romance language closely related to Romanian that allow unagreement, possibly as a result of long-term contact with an unagreement language like Greek leading to reanalysis of APCs that are string-identical to dAPCs to actual dAPCs.

Aromanian is an Eastern Romance language spoken in Albania, Bulgaria, Greece and the Republic of Macedonia, which has had a long history of close contact with Greek (Beis 2000, Campos 2005 and Katsanis & Ntinis 1990 for grammatical aspects; for a wider overview see

³⁰Compare Cornilescu & Nicolae (2014) for a very different, lexicalist analysis of Romanian APCs.

6.4.2 Unexpected availability of unagreement

In section 6.3 it was established that standard Italian does not allow unagreement (404a), which was linked to the use of pronominal determiners instead of dAPCs in that language. However, Höhn et al. (2016, to appear) describe two southern Italian dialects, northern and southern Calabrese, which allow unagreement (404bc), but have no dAPCs (405).

- (404) a. *I bambini giochiamo. [Standard Italian]
 the children play.1PL
- b. I quattrarə iucamə. [Northern Calabrese]
 the children play.1PL
 ‘We children are playing.’
- c. I figghioli iocamu. [Southern Calabrese]
 the children play.1PL
 ‘We children are playing.’ Höhn et al. 2016: 137f., (1)-(3)
- (405) a. Nua (*i) quattrarə iucamə. [Northern Calabrese]
 we the children play.1PL
- b. Nui (*i) figghioli iocamu. [Southern Calabrese]
 we the children play.1PL Höhn et al. 2016: 142, (13bc)

This is problematic for the generalisations proposed here and by Choi (2014b), both of which link unagreement to the presence of definite articles in APCs. The issue is more severe for Choi (2013, 2014b), since his analysis assumes that languages with and without unagreement have identical *xnP* structures and the role of overt D is crucial in licensing *pro* in his analysis of unagreement, see section 6.2.2.2 above. Since it is only the overtness of D that distinguishes APCs in languages with and without unagreement on Choi’s analysis, a structure where D is not overt cannot license *pro* in Spec,DP and unagreement is predicted to be impossible.

While the availability of unagreement is unexpected under the generalisation in (392), it can in principle be explained if these southern Italian varieties have the characteristic structure identified for unagreement, where person is encoded separately from definiteness. This perspective is supported by the observation that quantificational unagreement is also possible in these languages, as illustrated for southern Calabrese in (406a) in contrast to standard Italian (406b).³²

³²Höhn et al. (2016) present an alternative account based on variation between the vocabulary items of standard Italian and the southern varieties. That account posits a standard Italian pronominal determiner

-
- (406) a. Assai figghioli non lavuramu. [Southern Calabrese]
 many young.people NEG work.1PL
 ‘Many of us young people don’t work.’
- b. *Molti giovani non lavoriamo. [Standard Italian]
 many young.people NEG work.1PL Höhn et al. to appear

If this proposal is on the right track, the question remains why the D head cannot be overt in the context of an adnominal pronoun. One possibility is that the realisation of D is contextually restricted, similar to the way that a definite article cannot co-occur with a pronominal demonstrative in Spanish *xnPs*, but shows up when the demonstrative is postnominal. The unexpected behaviour of these Italian dialects is probably due to historical language contact with Greek (Höhn et al. to appear).³³

The data presented in this section indicate that the connection between unagreement and the use of (superficial) dAPCs is not always transparent, complicating the development of universal diagnostics of unagreement structure. Aromanian, CMA and southern and northern Calabrese also demonstrate that language contact may play a crucial role in the genesis of unagreement.

6.5 Summary

In this chapter, I have argued that the apparent lack of subject-verb agreement in so-called unagreement should be distinguished from Collins & Postal’s (2012) imposters and proposed an account for unagreement based on the dAPC structures from chapter 4. Due to the independence of person features from D in the relevant languages, the mechanism responsible for pro-drop can apply to the person head independently of the lower parts of the *xnP*. Therefore, definite *xnPs* are not necessarily third person in languages where nominal person is not encoded on D, contrary to common assumptions based on languages with pronominal determiners. The account makes correct predictions regarding quantificational unagreement (see also chapter 4) and object unagreement, but I have also addressed some languages (Arabic, Romanian) representing potential counterexamples to the proposed correlation between dAPCs and unagreement. Moreover, I have pointed out four languages where contact with an unagreement language (Greek) is likely to have influenced the development of unagree-

structure for the southern varieties, making it less attractive in the face of the quantificational unagreement data presented, which are more naturally explained by the assumption of a separate person head, cf. Höhn et al. (to appear).

³³Greek was widely spoken in areas of southern Calabria until the first half of the last century (Squillaci 2016).

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ment. Demonstrative features were assigned a central role in the alternation between [+dem] dAPCs and [-dem] unagreement constructions and the following chapter discusses further interactions of person and demonstrative features.

Chapter 7

Demonstratives, deixis and person marking

There are reasons to treat personal pronouns and demonstratives as forming a class. For example, both encode deicticity – typically personal deixis for personal pronouns and a range of categories including spatial, temporal and textual deixis for demonstratives (Anderson & Keenan 1985, Bühler 1934, Diessel 1999, Kordić 1999, Weissenborn & Klein 1982 among others). A number of languages lack distinct third person pronouns and use demonstratives instead. Even for languages with distinct third person pronouns like German (Rauh 2003) or English (Choi 2014a,b) demonstratives have been claimed to form part of the person paradigm, largely based on the complementary distribution of demonstratives and personal pronouns (Blake 2001: 416). In chapter 2 section 2.5, I presented a number of languages with personal pronoun-demonstrative constructions (PPDCs), where personal pronouns and demonstratives are not in complementary distribution. In a reverse of Blake’s (2001) argument, this suggests that they form distinct categories in such languages.

This chapter addresses two aspects of the interaction of person and deictic features. Section 7.1 discusses possible implications of the word order facts observed in PPDCs for the hierarchical relation between person and demonstrative features when they are structurally distinct, concluding that person features normally c-command demonstrative features. Section 7.2 addresses interactions between person and other deictic features on the basis of constructions where deictic features or demonstratives appear to play a role in verbal agreement. This may be related to observations by Harbour (2016: ch. 7), who argues that the features underlying person systems can be reflected in the demonstrative system of languages, too.

7.1 Observations on the structure of PPDCs

In chapter 2 section 2.5, I have categorised languages with PPDCs regarding the relative order of demonstratives and personal pronouns. This section discusses possible implications of these patterns regarding the structural position of demonstrative and person features in those languages, partly drawing on the proposals in chapter 3.

Recall how the Final-over-Final Constraint was employed in chapter 3 to interpret the range of variation in APC word orders. We can try to adopt this methodology to sketch the range of word orders expected for languages with PPDCs in which both demonstratives (Dem) and adnominal pronouns (Pers) have head status. This methodology can provide clues as to whether the demonstrative head in such a configuration c-commands the head encoding person or vice versa. The relevant range of possible structures is illustrated in (407) and (408), alongside the expected relative linear order of demonstratives and personal pronouns.

(407) Dem>Pers

- | | | |
|----|-------------------------------------|----------------|
| a. | [DemP Dem [PersP Pers [nP ...]]] | Dem – Pers – N |
| b. | [DemP [PersP [nP ...] Pers] Dem] | N – Pers – Dem |
| c. | [DemP Dem [PersP [nP ...] Pers]] | Dem – N – Pers |
| d. | *[DemP [PersP Pers [nP ...]] Dem] | Pers – N – Dem |

(408) Pers>Dem

- | | | |
|----|-------------------------------------|----------------|
| a. | [PersP Pers [DemP Dem [nP ...]]] | Pers – Dem – N |
| b. | [PersP [DemP [nP ...] Dem] Pers] | N – Dem – Pers |
| c. | [PersP Pers [DemP [nP ...] Dem]] | Pers – N – Dem |
| d. | *[PersP [DemP Dem [nP ...]] Pers] | Dem – N – Pers |

In head-initial structures the order of pronouns and demonstratives is expected to correspond to their hierarchical ordering, in head-final configurations the linear order is predicted to be the reverse of the hierarchical order, see (407ab) vs. (408ab). If demonstratives and person features are encoded on different sides of the core noun, the FOFC considerations become relevant. If demonstratives are hierarchically more prominent than adnominal pronouns, FOFC blocks them from postnominal position if adnominal pronouns are prenominal (407d). The opposite holds if personal pronouns are more prominent than demonstratives (408d).

Importantly, if either or both of these categories correspond to specifiers or adjuncts in a language, the reasoning from FOFC becomes irrelevant. Nonetheless, if they are on the same

side of the head noun, the one closer to the lexical head of the *xnP* is likely to be c-commanded by the more distant one.¹

Crucially, I have not found PPDC data involving full nouns that show any of the three orders predicted by Dem>Pers as in (407a-c). The only data that seem to support this hierarchical order appear to block the presence of overt nouns. This may be because pronouns behave in a “noun-like” way in the relevant configurations, see section 7.1.1. The remaining data presented in chapter 2 are compatible with the predictions of (408), indicating that Pers>Dem is the prevailing hierarchical relationship when demonstratives and person features are encoded separately in the *xnP* and are also distinct from the core *nP*. I address these data in section 7.1.2. Of the two languages described as allowing both orders of demonstratives and personal pronouns, Pitjantjatjara and Mandarin, the latter will feature in both sections. I have nothing to say about Pitjantjatjara beyond the descriptive overview in chapter 2.

7.1.1 Demonstrative > Person

Two languages in my sample feature PPDCs in which demonstratives may be analysed as hierarchically more prominent than personal pronouns, namely Japanese and Korean. In both of them demonstratives precede personal pronouns in PPDCs. Both also appear to be head-final in the sentential and nominal domain, featuring OV order and postpositions. Following the argumentation in chapter 3, their prenominal demonstratives and adnominal pronouns should therefore be phrasal rather than realisations of heads in the *xnP*. This means that the linear order of demonstratives preceding pronouns in PPDCs in these languages does not directly bear on the discussion of the configurations in (407) and (408) above. Nevertheless, this observation also suggests that the linear order of demonstratives preceding personal pronouns in PPDCs corresponds to their c-command relationship.

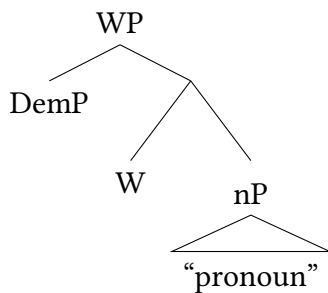
As mentioned in section 2.5, Korean does not seem to allow PPDCs with overt nouns and the status of such constructions is debated in Japanese (see fn. 42 in chapter 2). If nouns and personal pronouns are indeed in complementary distribution in the context of demonstratives, this supports the common view that pronouns behave like nouns in these languages (cf. Kuroda 1965: 105, Noguchi 1997, Déchaine & Wiltschko 2002 for Japanese and Sohn 1994 for Korean). A PPDC of the form demonstrative-personal pronoun would then be

¹When demonstratives and adnominal pronouns are phrasal and on different sides of the head noun, the range of possible structures is only restricted by the considerations of Cinque (2005) or Abels & Neeleman (2012). Without previous assumptions regarding the base-generated order of demonstratives and adnominal pronouns, the same problem as for (407) and (408) arises, but here headedness cannot act as a tie-breaker.

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structurally parallel to a common noun modified by a demonstrative², with the demonstrative *xnP* either simply adjoined to *nP* or merged in the specifier of some dedicated functional head, denoted as *W* in the sketch in (409) in the absence of specific proposals about the nature of this head.

(409)



In the current framework with category-less roots and categorising heads (see chapter 1), pronouns could be “nouns” either by virtue of being roots in the scope of a categoriser *n* or by being instantiations of *n* themselves. I remain agnostic as to the correct analysis, but the decision hinges on the question of whether there are grammatically active person features in these languages. If there are, they should be encoded on syntactic heads rather than on roots, which are typically taken to be syntactically inert (Borer 2005, De Belder 2011, Panagiotidis 2015). Otherwise, if these languages lack grammatical person features (cf. e.g. Longobardi 2008), the pronouns may correspond to roots, which is in line with the observation that they form open classes in both languages.

Mandarin allows PPDCs with both orders of pronouns and demonstratives. I propose here that constructions with demonstrative-personal pronoun order like (410) parallel the Korean and Japanese data.

(410) zhe-ge wo / na-ge wo [Mandarin]
 DEM.1-CLF 1 / DEM.2-CLF 1
 ‘this/that (aspect of) me

This construction cannot contain an overt noun, in line with the assumption that the apparent pronoun acts as a noun here. This is further supported by the interpretation of the construction, which parallels that of nominal uses of pronouns as in English *the real me*. Considering that the other PPDC construction in Mandarin with the reverse order of pronoun

²This raises further questions about the configuration of APCs, where such “noun-like” pronouns precede “simple” nouns. If pronouns are indeed a type of nouns in these languages, APCs would actually contain two distinct *xnP*s. See Inokuma (2009) for a proposal along these lines.

and demonstrative allows the presence of a lexical noun as in (411), it seems feasible that the pronoun in constructions like (410) is indeed nominalised.³

- (411) **Ni-men zhe-xie nianqingren** zhidao Wang ma?
 2-PL DEM.1-CLF young.people know Wang Q
 ‘Do you young people know Wang?’

To conclude this section, it appears that the availability of the hierarchical relation Dem>Pers depends either on nominal uses of pronouns or at least a structurally very low representation of person features.

7.1.2 Person > Demonstrative

I now turn to PPDCs where personal pronouns appear to c-command demonstratives. I distinguish three types of languages with PPDCs according to the position of personal pronouns and demonstratives relative to each other as well as to a head noun.

In Amele and Kaera PPDCs, demonstratives linearly precede personal pronouns like in Korean and Japanese. However, in contrast to the latter, they have postnominal demonstratives and adnominal pronouns which can co-occur simultaneously with an overt noun. In chapter 3, I have argued that both languages are head final, making an analysis of demonstratives and personal pronouns as heads feasible. On that view, the linear order of demonstratives preceding personal pronouns in these languages indicates a Pers>Dem configuration in hierarchical terms as sketched in (412).⁴

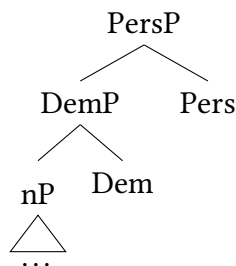
³As briefly discussed in chapter 3 section 3.3, it is possible that the Papuan language Usan shows a similar alternation in the location of pronouns. The language has head-final *xnPs*, so PPDCs like (i) repeated from (194) in that section seem to involve an article/demonstrative that is structurally higher than the pronoun. I do not have empirical data indicating whether lexical nouns can appear in such PPDCs. If they cannot, I suggest that examples like (i) actually involve a nominal use of a pronoun, while regular APCs have a structure where person and demonstrativity are not encoded in distinct positions.

(i) wo eng ininou wau imâ gâs ende [Usan]
 he this our boy younger.brother like thus
 ‘As for him, he is like our younger brother’ Reesink 1987: 54, (26)

⁴This is a simplified version of the structure proposed for Amele in chapter 3 section 3.3 with the label Dem instead of D for illustrative purposes.

Demonstratives, deixis and person marking

(412)



The languages in (413) have adnominal pronouns preceding demonstratives in prenominal position and also allow the presence of lexical nouns in PPDCs (for examples see chapter 2 section 2.5).

- (413) a. Manambu
 Guugu Yimidhirr
 Kuku Yalanji
 Kayardild
- b. Hausa

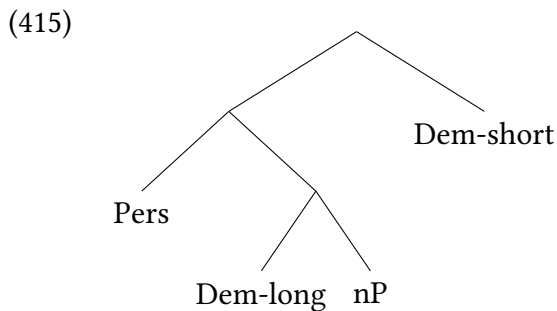
The languages listed in (413a) have postpositions. Taking this as an indication for head-finality and following the reasoning of chapter 3 section 3.1, this suggests that their *xnP*-initial pronouns are not heads, but adjuncts or specifiers. In either case, their linear order is expected to reflect their hierarchical relation, so that adnominal pronouns c-command demonstratives. I have no example including a full noun in Kuku Yalanji, so it is not clear whether we are dealing with the sort of nominalised pronoun as described for Mandarin in (410). Moreover, given that the language has ambidirectional APCs, it should in principle be possible to find PPDCs in both orders.

Hausa, on the other hand, has prepositions, which at least in principle enables a head analysis. Notice, however, that the existence of postnominal short form demonstratives (414a) in addition to the prenominal long forms (414b) complicates matters (Newman 2000: 150).

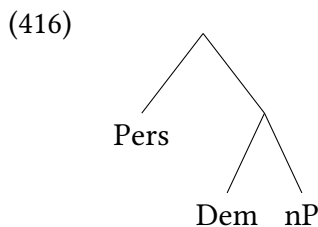
- (414) a. *mū mālāman-nàn* [Hausa]
 we teachers-DEM.1
 ‘we teachers’ after Newman 2000: 155
- b. *shī wannàn mālāmī*
 he DEM.1 teacher
 ‘he (this) teacher’ after Newman 2000: 371

If demonstratives in Hausa are heads, the Final-Over-Final Constraint predicts that postnominal demonstratives are structurally lower than prenominal ones – which in turn are

structurally lower than phrase-initial adnominal pronouns. If Hausa demonstratives (and potentially adnominal pronouns) are phrases, it still seems likely that the postnominal demonstrative is structurally lower than a prenominal pronoun. If there is a movement relation between the postnominal and the prenominal demonstrative positions, the widely assumed ban on rightward movement (Abels & Neeleman 2012, Cinque 2005) would suggest that the postnominal demonstrative represents the foot of the movement chain. I have not been able to find co-occurrences of both types of demonstratives within one *xnP*. This complementary distribution implies a relationship between both types of demonstratives, so it seems implausible that the short demonstrative would be located in a completely independent high position and a structure where the short demonstratives take scope over all other components of the *xnP* as in (415) seems very unlikely.



To conclude, the PPDC data in all the languages where adnominal pronouns precede demonstratives in a prenominal position suggest that the position realised by the adnominal pronoun is structurally higher than that of the demonstrative as sketched in (416). This is independent of the question of whether the relevant positions are heads, specifiers or possibly adjuncts. As discussed above, I assume the same general structural relation for Hausa postnominal demonstratives, too.



This general structural description also seems to apply to Mandarin PPDCs with personal pronouns preceding demonstratives as in (411) above.⁵

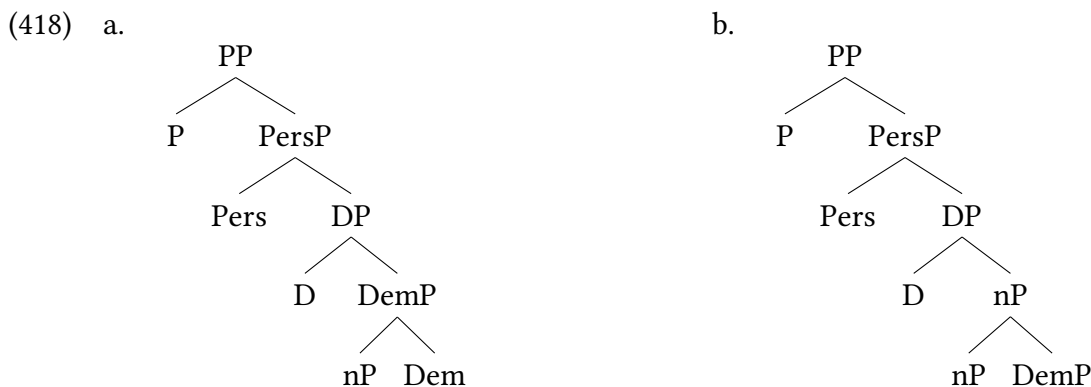
⁵Notice that if these are true PPDCs, this raises problems for a pronominal determiner analysis of Mandarin (see chapter 4 section 4.2.1), insofar as the positions of demonstratives and person features are not identical.

Demonstratives, deixis and person marking

The final group of languages instantiating the hierarchical relation Pers>Dem is listed in (417). These languages differ from most other languages discussed before insofar as demonstratives and adnominal pronouns occur on opposite sides of a head noun.⁶

- (417) a. Koromfe
 b. Indonesian
 Vaeakau-Taumako
 Tuvaluan
 Maori
 Teiwa

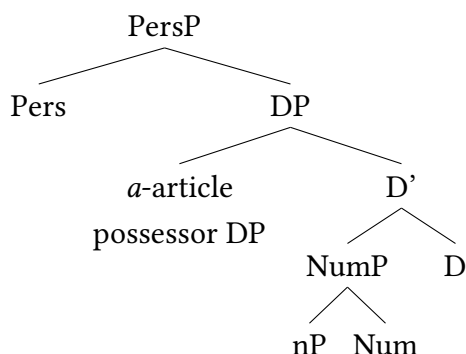
The fact that Koromfe and the Austronesian languages pattern similarly with respect to PPDCs fits neatly with the proposal in chapter 3 section 3.2 that their nominal structures share certain traits. Two potential analyses for the Austronesian languages discussed in that section are repeated from (183) in (418) below, with (a) illustrating the assumption that postnominal demonstratives head a projection in the *xnP* and (b) showing an analysis where they form phrases adjoining rightwards to a low projection in the *xnP*.



The structure proposed for Koromfe in chapter 3 is repeated below in (419). Recall that demonstratives in the language do not display distance- or person-based distinctions and were argued to head a right-headed DP. This bears a clear resemblance to the head-final DemP analysis in (418a), except for the different status assumed for the phrase-initial articles, which are taken to realise D in the Austronesian structures in (418) and SpecDP in Koromfe.

⁶Maori allows demonstratives in pre- and postnominal position, see section 3.2. A separate analysis of the prenominal demonstratives in Maori would put them in the class of languages with prenominal APCs and demonstratives and also lead to the conclusion that their hierarchical order is Pers>Dem.

(419)



In both (418) and (419), the head realised by adnominal pronouns is located high in the xnP and left-headed, while demonstratives are c-commanded by it. This predicts that pronouns precede demonstratives in PPDCs, in line with observations.

The lack of examples of PPDCs with lexical nouns in the Austronesian languages, noted in chapter 2 section 2.5, represents a potential complication. I have not been able to verify if lexical nouns are indeed systematically excluded in PPDCs. If this were the case, it might indicate that pronouns in these PPDCs are “noun-like” in the same sense as in Korean or Japanese, see above. Pronouns would realise nP rather than $Pers$ in the structures in (418), so the relationship of pronouns and demonstratives would be $Dem > Pers$.⁷ For now, I will continue to assume that one of the structures in (418) underlies Austronesian PPDCs as well. But even if Austronesian turned out to have $Dem > Pers$ hierarchies, the above considerations would put it in line with the generalisation that this hierarchical order is available only when pronouns behave in a special, “noun-like” way.

In conclusion, there are reasons to assume that most languages that structurally distinguish demonstratives and personal pronouns display the hierarchical order $Pers > Dem$. The opposite relation appears to only occur when pronouns are treated as nouns – either because person is associated with the lowest part of the xnP , n , or because “pronouns” are roots and person is not grammatically active at all.

7.2 Interactions of deixis and person marking

Person is one among a number of deictic categories including at least space and time (Anderson & Keenan 1985, Bühler 1934, Diessel 1999, Kordić 1999, Weissenborn & Klein 1982 among others).⁸ While acknowledging that demonstrative systems may contain a range of

⁷If this were further taken to mean that pronouns are generally “noun-like” in Austronesian, it would call into question the general validity of the assumption that APCs in these languages consist of a single xnP rather than an apposition of two $xnPs$.

⁸Parts of the discussion in this section are featured in Höhn (2015).

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information independent from the basic distinctions relevant to person systems, Harbour (2016: ch. 7) argues that pronominal and demonstrative systems may make use of common basic ingredients (in his system the features [\pm author] and [\pm participant]). This is, of course, especially clear in so-called person-based demonstrative systems (Anderson & Keenan 1985). While distance-based demonstrative systems indicate various levels of distance from the deictic centre, person-based systems are sensitive to distance from speech act participants. In a distance-based system with three degrees of demonstratives, the medial term indicates medium distance from the deictic centre – typically the author. In a person-based system, the medial term indicates proximity to the addressee.

In this section, I present additional data from PPDCs and some other constructions that support the idea that there is a connection between the features underlying person and at least some demonstrative systems. At least, this indicates a common interpretive basis, but some of the data presented here also raise the possibility that demonstrative features trigger formal effects such as agreement.

The PPDC data from the Austronesian languages presented in chapter 2 section 2.5.2 provide a first example. Most of the Austronesian languages discussed there have a three-degree person-based system of demonstratives. For first and second person PPDCs, Vaeakau-Taumako, Tuvaluan and Maori show a tendency for the degree of demonstrative to match the person of the pronoun. This is illustrated for Tuvaluan in (420), where the first person pronoun is accompanied by a first-degree demonstrative (indicating proximity to speaker) and the second person pronoun by a second-degree demonstrative (indicating proximity to the addressee).

- (420) a. **Au nei** koo fakatokatoka moo te fonon [Tuvaluan]
I DEM.1 INC prepare BEN the meeting
a te paalamene.
of the parliament
'I am getting ready for the parliamentary session.'
- b. A ko **koutou naa** e outou iloaga i te mea teenaa
and FOC you-PL DEM.2 N-PST you-PL know+TRN COMP the thing that
e tapu?
N-PST forbidden
'You know it's forbidden to do what you['re doing]?' Besnier 2000: 409

These data support the idea that there is a relationship between demonstrative and person features. However, as mentioned in chapter 2, the correspondence effects can be overridden by other (presumably pragmatic) considerations. Therefore, positing some sort of feature

sharing or agreement may be too strong for these data. A simpler interpretation would be that these collocation effects are the result of the coalescence of the deictic centre of the demonstrative with the meaning of the pronoun. Essentially, if the demonstrative in (420a) gets a spatial meaning, it is most likely to be a first-degree demonstrative because the speaker is proximate to herself.⁹

Such an approach supports the hypothesis that demonstratives can employ person features in their featural make-up, but the effect of these features is further modulated by other features responsible for the different readings demonstratives may get in a given language. In the Austronesian example above, for instance, the collocation between first person pronouns and first-degree demonstratives can be overridden under specific, presumably non-spatial readings of the demonstrative.

The remainder of this section discusses data from three other languages where demonstrative features seem to play a role for the determination of verbal agreement. The constructions discussed are from Pomak in section 7.2.1, from Warlpiri in section 7.2.2 and Basque in section 7.2.3.

7.2.1 Deictic articles in Pomak

Pomak is a South Slavic vernacular, spoken in Western Thrace, Greece (Meinardus 2002). Similar to other Balkan languages, it has enclitic articles. In contrast to languages like Standard Bulgarian, however, the articles do not only encode definiteness, but three deictic degrees as well (see Miletič 1903: 235–238; Miletič 1912: 130f.; Mladenova 2007: 317–325; Papadimitriou 2008: 117–121; Adamou 2011).¹⁰

The enclitic articles consist of a vowel, determined by gender and number of the head noun as well as phonological properties of the final syllable of the host of the article, and a consonantal marker indicating the deictic value as listed in (421).

(421) *Pomak deictic articles*

- /s/ proximity to speaker
- /t/ proximity to addressee
- /n/ remote from both speaker and addressee

⁹These considerations parallel Corbett's (2006, 137) discussion of honorifics in some languages "where the existence of multiple honorifics suggests an agreement analysis, but where it is not clear that this is justified. It may be argued that each honorific is determined on pragmatic grounds (and that they agree only in the sense that they are being used in the same pragmatic circumstances)."

¹⁰Closely related Macedonian shows a similar deictic article system with slightly different forms (Friedman 2002; Tomić 2012: 146) and may be expected to behave similarly to Pomak with respect to the issues discussed here. Future research would have to show to what extent this prediction is borne out.

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Notice that the language also has separate demonstratives which encode the same deictic categories as illustrated in (422).¹¹ While Papadimitriou (2008) describes a ban on the co-occurrence of demonstratives and deictic articles, I have been able to observe such configurations, see (423). It may be that this is subject to dialectal variation.¹²

- (422) *isa* 'zi 'DEM.1, this here'
ita 'zi 'DEM.2, that there (close to addressee)'
ina 'zi 'DEM.3, that there (far from speaker and hearer)'

- (423) **Inazi** örendji-eve-**no** storivo leba. [Pomak]
DEM.3.PL student-PL-DET.3 made.3PL bread
'These students made bread.'

Data of this sort indicate that distinguishing between demonstratives and deictic features makes sense here, since deictic distinctions are reflected on demonstratives as well as articles, while presumably only demonstratives carry demonstrative features. If demonstrative features are not necessarily identical to deictic features, this may lend further support to the assumption of a distinct [+dem] feature in the analysis of unagreement in chapter 6. At the same time, it also raises questions regarding the precise interpretive contribution of a demonstrative feature, which I leave open here except for the remarks in chapter 6.

In addition to spatial uses, Adamou (2011) also distinguishes temporal and modal uses of the articles. For the current discussion the central observation is that the deictic articles also seem to covary with the choice of person in APCs, constituting what may be described as personal uses. This is illustrated in (424), where the speaker-proximate article is used with a first person plural APC.

- (424) 'nami Po'matsem-**se** no na pa'maga 'nikutri
we.DAT Pomaks.DAT-DET.1 1PL.DAT NEG help.3SG nobody
'Nobody helps us Pomaks.' after Papadimitriou 2008: 582

The examples in (425) further illustrate this co-variation in first and second person plural subjects, which display the first- and second-degree article respectively.

- (425) a. (nuje) örendji-eve-**so** nasmeme so
we student-PL-DET.1 laughed.1PL REFL
'We students laughed.'

¹¹Papadimitriou (2008) includes stress markers, which I retain in examples quoted from that work.

¹²Compare also Tomić (2012: 154) on similar variation in Macedonian and the reference to Topolinjska (1995: 52) for the observation that co-occurrence is frequently observed in contact areas with Greek.

- b. (vuje) örendji-eve-to nasmete so
 you.PL student-PL-DET.2 laughed.2PL REFL
 ‘You students laughed.’

The optionality of overt pronouns in such contexts corresponds to the unagreement construction discussed in detail in chapter 6, albeit with an interesting descriptive difference. The subjects in the unagreement constructions of, e.g., Spanish and Greek do not contain any morphological person marking. In the Pomak data in (426), on the other hand, the deictic articles provide morphological cues regarding the person specification of the subject even in the absence of overt pronouns.

This raises the question of whether non-third person verbal agreement is directly controlled by the deictic article when there is no pronoun or whether unpronounced nominal person features (or a ‘null pronoun’) control agreement as suggested in chapter 6 for the unagreement phenomenon. Considering that the deictic articles can also be used in third person contexts, the first option seems too strong and I assume an unagreement-type analysis instead.

The observable correlation between deictic features on the article and person features on a distinct position in the *xnP* (which can be realised by an adnominal pronoun) can be addressed in two potential ways. If both features are indeed independently interpretable, an essentially semantic approach along the lines sketched earlier for Austronesian could apply. In that case, a first person *xnP* is prototypically ‘close to the speaker’ and therefore marked by a first-degree determiner. This would lead to some redundancy in cases like (423) where demonstratives and deictic determiners co-occur. Alternatively, the syntactic position associated with adnominal pronouns and demonstratives, which seems to be involved in triggering verbal agreement, is also the locus of interpretable deictic features and the determiner reflects these due to an agreement relation. If this is on the right track, the phenomenon described here could represent one of the few cases of *xnP*-internal person-agreement.¹³

I have not been able to conduct sufficient research to clarify to what extent specific contexts can license a mismatch between the deictic features of the article and those of an adnominal demonstrative or pronoun, similar to the Austronesian data. If such mismatches are unattested or highly marked, this would provide support for an agreement-based account. If they are available, this may suggest that these structures involve two independent sets of deictic/person features. Pending further research into Pomak, I conclude with the observation that the Pomak data resemble the Austronesian PPDC data insofar as they seem to allow the co-occurrence of person features with other deictic features in the same *xnP*. Papadimitriou

¹³If the *xnP*-initial demonstratives and pronouns are indeed the agreement controllers, it seems remarkable that they are structurally higher than the agreement goal.

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(2008: 581) provides the example in (426), which suggests that actual PPDCs are possible in Pomak. However, my consultants suggested that this utterance, if acceptable at all, involves some form of appositive or parenthetical construction as indicated by the translation.

- (426) ka'na da 'dumet 'tije i'nezi i'tam dva'mina-na?
what SBJV say.3PL they.NOM DEM.3.PL there two-DET.3
'What might(?) they say, those two there?'

after Papadimitriou 2008: 581; English gloss and translation GFKH

I tentatively conclude that Pomak does not allow full PPDCs, i.e. demonstratives and personal pronouns are actually in complementary distribution within the *xnP*, in contrast to the PPDCs observed in Austronesian and other languages.

7.2.2 Warlpiri unagreement with demonstratives

Hale (1973) notes examples like (427) from Warlpiri (Pama-Nyungan), where the subject *ɲarka* 'man' co-occurs with a coreferent first person singular clitic.¹⁴

- (427) ɲarka ka-ɲa puɭa-mi [Warlpiri]
man PRS-1SG shout-NPST
'I man am shouting.' Hale 1973: 317, (24a)

This is again reminiscent of the unagreement phenomenon investigated in chapter 6.¹⁵ If, following Simpson (1991) and contra Jelinek (1984), Warlpiri pronominal clitics are treated as agreement markers, this suggests that the subject *xnP* contains first person features. In line with the intuition behind Postal's (1969) pronominal determiner analysis for English, Hale (1973) indeed proposes that in Warlpiri, too, "it is the determiner, rather than the nominal, which determines the person of a given noun phrase" (Hale 1973: 317) and that in examples like (427) the determiner has been deleted (in the current model, it is alternatively possible to assume that the determiner is phonologically null). In support of this analysis, he observes that constructions with overt pronouns acting as head-final determiners, like (428), "are possible, albeit rare, in actual usage" (p. 317).

¹⁴The glossing is slightly modified. The orthography is that of the original example, hence the slight differences to Lyons's (1999) examples below.

¹⁵The Warlpiri examples quoted in the literature are singular, while the literature on unagreement mostly focused on Indo-European languages displays a bias for plural unagreement, see Höhn (2016) and references in chapter 6. This does not mean that the construction is restricted to the singular in Warlpiri, but suggests that singular unagreement in Warlpiri is neither impossible (as in Spanish) nor particularly marked/rare (as in Greek).

- (428) *ŋarka ŋatju*
man I
 ‘I man’

after Hale 1973: 317

Noun phrases with demonstratives can partake in the unagreement-like construction in Warlpiri, see Hale (1973: fn. 12) and the examples in (429b) and (430b). This is of particular relevance to the current discussion of interactions of person features with demonstratives. It contrasts with the facts observed for unagreement in Greek or Spanish, where unagreeing *xnPs* normally cannot contain a demonstrative (see Choi 2014b, Höhn 2016 and chapter 6 section 6.3.2). Moreover, as in the Austronesian and Pomak examples before, there is a correspondence between the person features of the clitic pronoun and the degree of the demonstrative. According to Lyons (1999: 145), Warlpiri has a mixed person-oriented and distance-oriented demonstrative system. The demonstratives found in unagreement contexts are the person-oriented ones. The speaker-proximate demonstrative can appear in first person unagreement as in (429b), while the addressee-proximate one appears in second person contexts, see (430b).

- (429) a. *Ngarka njampu ka purlami.*
man DEM.1 AUX shout
 ‘This man (near me) is shouting.’
 b. *Ngarka njampu ka-rna purlami.*
man DEM.1 AUX-1SG shout
 ‘*I man am shouting.’

Lyons 1999: 145; glossing modified

- (430) a. *Ngarka yalumpu ka purlami.*
man DEM.2 AUX shout
 ‘That man (near you) is shouting.’
 b. *Ngarka yalumpu ka-ŋpa purlami.*
man DEM.2 AUX-2SG shout
 ‘*You man are shouting.’

Lyons 1999: 145, (16)

As in the languages discussed before, Hale’s (1973) analysis raises the question of which element controls agreement, the demonstrative or the non-pronounced person features in the *xnP*.¹⁶ If the controller is a silent pronominal determiner in addition to the overt demonstrative

¹⁶Another alternative would be to treat pronominal clitics as interpretable (Alexiadou & Anagnostopoulou 1998, Barbosa 1995, Borer 1986, Jelinek 1984) and to adopt an account like Ackema & Neeleman (2013) for Warlpiri-type unagreement. I will not pursue this option here.

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determiner, the pronominal determiner would be expected to appear overtly as well, leading to the prediction that Warlpiri allows overt PPDCs of the form noun + demonstrative + personal pronoun, e.g. *ɲarka ɲjampu ɲatju* ‘man DEM1 I’. Regarding the correspondence between person and deictic features, the same questions as in the Austronesian languages and Pomak arise as to whether the correspondence is due to an actual agreement relation or whether there are purely semantic reasons.¹⁷

Alternatively, the controller might be the demonstrative determiner itself, i.e. *ɲjampu* and *ɲalumpu* respectively in (429b) and (430b). This would suggest that the subject can access the speech act participant feature within whatever features correspond to demonstrative degrees (near SPEAKER, near ADDRESSEE), strengthening the idea that these features have not only semantic, but also grammatical import. However, such an account with the demonstrative as the direct controller of the verbal person features would be complicated by the fact that these demonstratives are also compatible with third-person agreement and the corresponding interpretation, cf. (429a) and (430a). In the absence of an account for this indeterminacy, I therefore surmise that the approach sketched in the previous paragraph is on the right track.

Warlpiri resembles the Pomak data with respect to the availability of an unagreement-like construction. However, the possibility of using demonstratives in these constructions sets Warlpiri apart from Pomak – even more clearly so if PPDCs can indeed be found as predicted above. To the extent that this suggests a syntactic split of the syntactic positions of demonstratives and adnominal pronouns, Warlpiri more closely resembles Austronesian, or indeed the other Pama-Nyungan languages with PPDCs discussed in section 7.1. Future research might address the question of whether these languages also allow unagreement-like structures.

7.2.3 Basque demonstratives and person agreement

In the discussion of nominal person in Basque in chapter 2 section 2.3.4.1, I pointed out the naturally occurring example in (431) with proximate demonstrative *honek* ‘this’ heading an ergative DP in a sentence with ergative first person singular agreement on the auxiliary. In line with the hypothesis that person is encoded on D in Basque (see chapter 3 section 3.4.2), it seems that the demonstrative plays a role in triggering the first person agreement. This section briefly addresses some questions such data raise for the interaction of person and demonstratives.

¹⁷These questions also arise if the pronominal clitics are analysed as arguments as per footnote 16.

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- (431) [saile-ko zuzendari-a naiz-en **hon-ek**]_{DP} adierazi nahi
department-LNK director-DET.ABS.SG be.1SG.ABS-REL **DEM.1.ERG.SG** declare can
dut...
3SG.ABS.AUX.1SG.ERG
‘This one who I am the departmental director can(1sg) declare (that...)’

The possibility of demonstratives appearing with non-third person agreement seems to be most readily available in relative clause contexts in modern Basque, which is why I focus on such constructions here.¹⁸ Basque relative clauses cannot be headed by personal pronouns (De Rijk 1998: 140ff.) as illustrated in (432a). This may be related to the proposal from chapter 3 section 3.4.2 that Basque personal pronouns do not permit overt material to their left in their spell-out domain, since Basque has prenominal relative clauses. Relative clauses can instead be headed by a definite (or proximate) article (432b) or a demonstrative (432c), which parallels the construction in (431).

- (432) a. *Bizikleta asko egi-ten dugu-n **gu-k** gehiago jan behar
bicycle much do-IPFV 3SG.ABS.AUX.1PL.ERG-REL we-ERG more eat need
dugu.
3SG.ABS.AUX.1PL.ERG
b. Bizikleta asko egi-ten dugu-n **ok** gehiago
bicycle much do-IPFV 3SG.ABS.AUX.1PL.ERG-REL-PROXART.ERG.PL more
jan behar dugu.
eat need 3SG.ABS.AUX.1PL.ERG
‘We who cycle a lot need to eat more.’

¹⁸De Rijk (2008: 209) provides example (i), where a demonstrative seems to be associated with a non-third person interpretation, but points out that in modern Basque these constructions cannot appear with non-third person verbal agreement. Since there is a mismatch between the “notional” and the “grammatical” person of the *xnP*, this construction does not illustrate nominal person in the sense applied here, but may be an imposter (Collins & Postal 2012 and chapter 6 section 6.2.3). While I choose to distinguish nominal person from imposters here, the concepts are clearly interrelated and Basque constructions of this sort may provide further insights into the nature of that relation.

- (i) Alargun gaixo hau ez doa ino-ra.
widow poor DEM.1.ABS.SG NEG 3SG.ABS.AUX anywhere-ALL

‘This poor widow isn’t going anywhere.’ (That is, I, poor widow, am not going anywhere.)

de Rijk 2008: 209

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- c. Bizikleta asko egi-ten dugu-n **hauek** gehiago jan
bicycle much do-IPFV 3SG.ABS.AUX.1PL.ERG-REL DEM.1.PL.ERG more eat
 behar dugu.
 need 3SG.ABS.AUX.1PL.ERG
 ‘We who cycle a lot need to eat more.’

Following de Rijk (2008: 205), Basque has a person-based demonstrative system distinguishing the three degrees in (433):

- (433) *hau* ‘this, DEM.1’, related or near to the speaker in space or time
hori ‘that, DEM.2’, related or near to the addressee in space or time
hura ‘yon, DEM.3’, removed from both speaker and addressee in space or time

Considering that a form of the first-degree demonstrative *hau* was used in the first person contexts in (431) and (432c), it seems a plausible hypothesis that the degree of these demonstratives is person-based in a truly featural way. That is, the first degree pronoun does indeed contain features characteristic for first person, which play a role in the realisation of the demonstrative D head as a first-degree demonstrative and in the verbal agreement triggered by the DP as well.

The corresponding expectation that second person contexts should lead to the use of second-degree demonstratives seems to be borne out as illustrated by the pattern in (434), where a second-degree demonstrative is clearly preferred in second person contexts.¹⁹

- (434) a. *Bizikleta asko egi-ten duzue-n hauek gehiago jan
bicycle much do-IPFV 3SG.ABS.AUX.2PL.ERG-REL DEM.1.PL.ERG more eat
 behar duzue.
 need 3SG.ABS.AUX.2PL.ERG
- b. Bizikleta asko egi-ten duzue-n horiék gehiago jan
bicycle much do-IPFV 3SG.ABS.AUX.2PL.ERG-REL DEM.2.PL.ERG more eat
 behar duzue.
 need 3SG.ABS.AUX.2PL.ERG
- ‘You who cycle a lot need to eat more.’

¹⁹I leave aside the option of having a definite article as head of the relative clause, parallel to (432b), which would invoke the variation in the use of the proximate plural, which appears in second person plural contexts in western, but not in central dialects, cf. chapter 3 section 3.4.2.

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- c. ?Bizikleta asko egi-ten duzue-n haiek gehiago jan
 bicycle much do-IPFV 3SG.ABS.AUX.2PL.ERG-REL DEM.3.PL.ERG more eat
 behar duzue.
 need 3SG.ABS.AUX.2PL.ERG

Similar to what was reported for the Austronesian languages earlier, these collocation tendencies can be overridden, particularly if there is a strong spatial reading. That is, at least some speakers could accept examples like (434ac) in contrastive contexts involving different groups so that the spatial meanings of the demonstratives would become relevant for disambiguation. Moreover, plain third person uses of demonstratives are always possible in these (and other) contexts.

Singular APCs represent another case where person features appear to interact with the choice of demonstratives. While the examples discussed here are confirmed for western Basque, notice that preliminary probing suggests that other, particularly central varieties may be more restrictive.²⁰ The examples in (435) are repeated from chapter 2 and illustrate the use of the western Basque demonstratives *-au* (corresponding to standard *hau*) in first singular contexts and *-ori* (corresponding to standard *hori*) with the second person singular.

- (435) a. ni gizajo-au
 I poor-DEM.1.SG
 ‘poor me’
- b. zu txotxolo-ori
 you fool-DEM.2.SG
 ‘you fool’ after Artiagoitia 2012: 66, (100)

These structures do not seem to be restricted to emotionally marked expressions like those in (435), as common nouns with human denotation can also be found in such singular contexts, see (436).²¹

- (436) a. [Ni irakasle xume-au] ondo tratatu nau [Western Basque]
 I teacher simple-DEM.1.SG.ABS well treat AUX.1SG.ABS
 unibertsitate-a-k.
 university-DET.SG-ERG
 ‘The university has treated me simple teacher well.’

²⁰A consultant for central Basque seemed to prefer the use of the plain definite article in the first person singular.

²¹Thanks to Xabier Artiagoitia and Koldo Zuazo for providing these examples.

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- b. [Zu unibertsitate-ko irakasle-ori] primeran bizi zara.
 you.SG university-LNK teacher-DEM.2.SG.ABS very.well live AUX.2SG.ABS
 ‘You university teacher live very well.’

The correspondence between the postnominal demonstratives and pronominal personal pronouns finds a parallel in the phenomenon of doubly determined DPs in western Basque, where demonstratives can simultaneously appear pre- and postnominally in contrast to their strictly postnominal placement in other Basque varieties. A brief discussion of Artiagoitia’s (2012) approach to the phenomenon is provided in chapter 3 section 3.4.2. Importantly for present purposes, Artiagoitia (2012) frames his analysis of doubly determined DPs and adnominal pronouns in terms of agreement between the pronominal demonstrative or pronoun and the phrase-final determiner as illustrated in (437).

- (437) Agreement effect in doubly determined DPs Artiagoitia 2012: 69, (107)

Western demonstratives		Personal pronouns	
<i>demonstrative type</i>	<i>agreeing D</i>	<i>pronoun</i>	<i>agreeing D</i>
hau ‘this’	-au/-a	ni ‘I’	-au
hori ‘that’	-ori/-a	hi, zu ‘you’	-ori
ha ‘that’ (distal)			
hónek ‘these’	-ok/-ak	gu ‘we’	-ok/-ak
horrek ‘these’	-ok/-ak	zuek ‘you all’	-ok/-ak
hárek ‘these’ (distal)			

The upper part of the table shows that the first and second degree phrase-final demonstratives correspond to the same-degree pronominal demonstratives on the one hand, and to first and second person singular pronominal pronouns respectively on the other hand. Just as observed before for the relative clause contexts, the degree of a demonstrative does not automatically correspond to grammatical person, but the observable correspondences nonetheless suggest that there is some sort of connection between both categories.

As stated above, I do not offer a solution here, but will briefly sketch the theoretical issues raised by such constructions. I proposed earlier that the vocabulary items of personal pronouns are restricted to contexts without preceding material in the same spell-out domain in Basque, as illustrated in (438) repeated from chapter 3 section 3.4.2.

- (438) #+D[def, +auth, pl] ↔ gu / ϕ [__]
 #+D[def, -auth, +part, pl] ↔ zuek / ϕ [__]

This may account for the fact that they cannot appear as heads of relative clauses because they are not eligible for insertion into a non-third person marked D position with preceding

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overt material. As discussed in chapter 3 section 3.4.2, the proximate plural morpheme may act as appropriate elsewhere VI.

The central question concerning personal uses of demonstratives has two aspects. On the one hand, why can demonstratives sometimes appear in such non-third person contexts, and on the other, why can this only happen under specific circumstances? The answer to the first question seems to be that somehow the person features at the basis of the Basque demonstrative system can be employed to realise non-third person features on an *xnP*. To see why this possibility has to be restricted, remember de Rijk's (2008) observation paraphrased in footnote 18 above, that even though an *xnP* marked by the first-degree demonstrative *hau* can receive a first person interpretation, it still requires third person auxiliary agreement (except for the constructions discussed in this section). If the degree of a demonstrative corresponded directly to grammatical person, it should consistently and freely license the corresponding non-third person verbal agreement, contrary to fact.

In the present framework, syntactic structure is generated with fully specified feature sets. An *xnP* triggering *x*-person agreement would have to be generated with *x*-person features and vocabulary insertion then identifies the most appropriate exponent for the head bearing person features. If there is no appropriate vocabulary item, the main options appear to be either that the structure cannot be successfully realised or that there is some post-syntactic operation that manipulates the input feature matrix so that an appropriate VI can be inserted. This operation could remove the person features that favour the insertion of the – ineligible – pronominal VIs by means of impoverishment, or alternatively somehow demote them to demonstrative features. This would result in a configuration where demonstrative VIs would be eligible for insertion, assuming that they are underspecified for grammatical person. This would represent a case of emergence of the unmarked (McCarthy & Prince 1994).²² While the nature of this operation is not clear at the moment and an operation of this sort may turn out to be overly powerful, the general intuition that first or second person features are somehow

²²A similar, albeit more restricted version of such 'elsewhere' uses of demonstratives might be at work in similar phenomena in other languages. In German, for example, demonstrative subjects normally also trigger third person verbal agreement. However, under certain circumstances demonstratives heading a relative clause can trigger non-third person agreement on the matrix verb. In a context like (i), the canonical head of the relative clause would be the personal pronoun *ihr* 'you.PL', but colloquially a demonstrative *die* 'those' is equally acceptable. Any meaning differences are very subtle, but it is possible that the demonstrative may yield a somewhat more generic reading.

- (i) (Die/ ihr), die ihr euch so da reingehängt habt, solltet
DEM.NOM.PL you.PL REL.NOM.PL you.PL yourselves so there put.energy have.2PL should.2PL
deswegen jetzt nicht noch Probleme bekommen.
because.of.that now not PRT problems get

'You who have put so much energy into this shouldn't get problems now because of that.'

See Douglas (2015) for discussion of similar constructions in English and Dutch.

being related to first- and second-degree demonstrative in the contexts discussed here is hard to avoid.

Finally, it bears mentioning that in contrast to the Austronesian data mentioned above, the correspondence between demonstrative and person features observed in Basque does not depend on the existence of PPDC structures. This is in line with the plausible assumption that Basque demonstratives and articles realise the same structural position and the claim made in section 3.4.2 that person features are encoded on that same head. On these assumptions, the co-occurrence of personal pronouns and demonstratives in the same *xnP* is correctly excluded. So while the correlation between grammatical person and deictic/demonstrative features in Austronesian (and potentially other languages with PPDCs) points to a connection between distinct positions in the *xnP*, the Basque data seem to indicate variation in the realisation of a single syntactic position.²³

7.3 Summary

This chapter discussed aspects of the relationship between person features and other deictic features in the *xnP*. Section 7.1 dealt with constructions where demonstratives and personal pronouns are not in complementary distribution (PPDCs), supporting the hypothesis that person features and the features characteristic for demonstratives (including their deictic features) are encoded in distinct syntactic positions. A tendency emerging from the investigated range of PPDCs is that personal pronouns are structurally higher than demonstratives, suggesting that person features tend to scope over other deictic features. Exceptions from this tendency seem to be restricted to languages and contexts where personal pronouns have a noun-like behaviour, indicating either the absence of grammaticalised person features or their encoding on a very low head in the *xnP*.

While the first part of the chapter aimed at teasing apart person and other deictic features, section 7.2 was concerned with data showing their interaction. I reviewed data from Austronesian languages, Basque, Pomak (South Slavic) and Warlpiri (Pama-Nyungan) that supports Harbour's (2016) suggestion that demonstrative systems and (some of) the deictic categories they distinguish can be related to person features. In the Austronesian languages, this relation is expressed in the correlation between the degree of the demonstrative and the person of the pronoun in PPDCs. In Basque, Pomak and Warlpiri, a similar collocation is observed in certain configurations between the degree of demonstratives or deictic articles and verbal person

²³This difference is somewhat weakened if Artiagoitia's (2012) analysis for doubly determined DPs is adopted, where the postnominal determiner agrees with the prenominal demonstrative or pronoun. However, the crucial position showing the non-third person uses of demonstratives would still be the postnominal determiner position.

agreement. In Austronesian, this seems to indicate some form of relation between the position encoding grammatical person and another position encoding the demonstrative/deictic features, possibly in terms of agreement, but possibly more loosely connected to the semantic correspondences. Similar observations probably apply to unagreement-type constructions in Warlpiri and Pomak. Although the demonstratives (Warlpiri) or deictic articles correlate with verbal agreement, it seems more plausible that the actual agreement trigger is not the deictic, but a distinct syntactic head encoding person. In Pomak, the relevant deictic article is independent of the position of demonstratives and adnominal pronouns, so the deictic features on an article are expected to remain visible even when the pronominal position is silent in unagreement. Warlpiri, on the other hand, employs regular demonstratives in unagreement contexts, so the hypothesis that independent person features trigger the observable verbal agreement leads to the prediction that Warlpiri should allow PPDCs, like the Austronesian languages.

For Basque, finally, I argued earlier that demonstratives, the definite article and person features are associated with the same syntactic position, commonly identified as D, which correctly predicts its lack of PPDCs.²⁴ It also suggests, however, that the syntactic position realised as a demonstrative can indeed directly trigger non-third person verbal agreement, which is unique among the data surveyed in this chapter. I have tentatively suggested that this special property of Basque has morphological roots and is connected to the morphophonological restrictions of the vocabulary items realised as full personal pronouns.

²⁴Although doubly determined structures in western Basque may be descriptively similar to PPDCs.

Chapter 8

Conclusion

This thesis has discussed the properties of non-possessive nominal person, in particular adnominal pronoun constructions, based on a survey of 92 languages from 44 genera (including three Creole languages). The first section of this concluding chapter summarises my findings. Section 8.2 presents a hypothesis regarding the location of person that seems to emerge from the observed data. Finally, section 8.3 offers some speculation as to how the observable variation may be systematised followed by a general outlook for future research.

8.1 Findings

Among the 87 languages where data on nominal person was available as discussed in chapter 2, I observed the dimensions of variation in (439) and additionally recorded the properties in (440) to discover potential interactions.

- (439) Dimensions of variation for expressions of nominal person
- a. Morphological expression: identical to independent pronoun (APCs), clitic/affixal marking
 - b. Relative position: prenominal, postnominal
 - c. Co-occurrence with definite article
 - d. Co-occurrence with demonstrative modifiers
 - e. Person/number restrictions
- (440)
- a. Type of adposition: prepositions, postpositions
 - b. Relative position of demonstratives: prenominal, postnominal

Conclusion

In my analysis I adopted the assumptions in (441) and proposed the points of variation adduced in (442).

(441) Core assumptions (see chapter 3)

- a. Nominal person is syntactically associated with the *xnP*.
- b. Final-over-Final-Constraint/FOFC (Biberauer et al. 2014a)
- c. If adpositions are heads in the *xnP*, they are structurally higher than nominal person and provide insights regarding the headedness of the *xnP*.

(442) Theoretical points of variation

- a. adpositions as part of *xnP* (chapter 3)
- b. status of adnominal pronouns/demonstrative modifiers: heads or phrases (chapter 3)
- c. class identity of (at least adnominal) pronouns and demonstratives (chapters 3, 7)
- d. headedness: initial or final head encoding person features (chapter 3)
- e. class identity of adnominal pronouns and definite articles (chapters 4, 5, 6)
- f. overtness of nominal person (unagreement, chapter 6)

79 of the languages investigated have APCs only and eight display clitic person marking, with three of these additionally allowing adnominal pronouns. A majority of 65 languages have adnominal pronouns in prenominal position, while clitic person markers are postnominal in all but one language with clitic person marking.

Pre- and postpositions occur roughly equally in languages with prenominal APCs, while languages with postnominal APC (almost) exclusively use postpositions. If the position of adpositions reflects head-directionality in the *xnP*, this means that prenominal APCs are attested in systems with head-final and head-initial *xnPs*, but postnominal APCs or enclitic person marking is only found in languages with head-final *xnPs*. I have suggested (chapter 3) that the prevalence of prenominal APCs is at least partly due to the fact that they can have different sources in line with these head-directionality observations. They may involve adnominal pronouns realising a head in a head-initial *xnP*, but they can also arise if adnominal pronouns are phrases in specifier positions within a head-final *xnP* on the common view that specifiers are universally linearly initial in their phrase (e.g. Kayne 1994). In contrast, I suggested that postnominal APCs or enclitic person marking only arise when person is encoded on a head in a head-final *xnP*.

Only five languages in the survey instantiate ambidirectional APCs, i.e. they have adnominal pronouns occurring either pre- or postnominally. Four of them show the same flexibility in the positioning of demonstratives and are described as having “free” word order.

The restrictions observed in English for the range of person-number combinations available for the expression of nominal person (no singular argumental APCs **I linguist love studying language.*; no third person APCs **they students*) have proved to be far from universal. Singular and third person APCs are well attested and their availability is indeed more common in the present sample than the bans observed in English. However, the survey also suggests that singular APCs and third person APCs are crosslinguistically marked as expressed in the implicational universals in (443) and (444).

(443) *Generalisation on number in APCs:*

If a language has singular APCs, it also has non-singular APCs.

(444) *Generalisation on person in APCs:*

If a language has third person APCs, it has first and second person APCs.

Rauh’s (2004) proposal that the relative markedness of singular APCs in German is essentially due to the narrower range of contexts in which singular APCs can satisfy the Gricean communicative maxims also provides the most promising approach to the markedness of singular APCs, although it does not explain what determines whether a given language allows singular APCs. A satisfactory answer to this question remains a desideratum for future research.

In the face of potential counterexamples from four languages (three Timor-Alor-Pantar languages and Wari’) and problems raised by two Scandinavian languages (chapter 5 section 5.2.2), I proposed the alternative, weaker generalisation for person in (445) for consideration.

(445) *Weaker generalisation on person in APCs:*

If a language has third person plural APCs, it has first and second person plural APCs.

The number restriction appears to be more wide-spread than the person restriction. The ratio of languages with singular APCs to those excluding them is 28:18 (compressed by genera as described in chapter 2), while the ratio for languages without person restrictions versus those with a restriction against third person APCs is 28:8. There is a suggestive tendency for languages that are unrestricted for one category to be unrestricted for the other one as well, although there are a number of mismatches either way as described in detail in chapter 2.¹

¹The 28 genera with third person APCs are not identical to the 28 genera permitting singular APCs (although they overlap).

Conclusion

For a substantial subset of the languages without third person APCs, the lack of third person pronouns is explained by the presence of a definite article which competes for insertion with third person pronouns and wins the competition in adnominal contexts, in line with the pronominal determiner hypothesis. Open questions remain for languages where there is no complementary distribution between adnominal pronouns and definiteness markers because they lack definite articles or because they use definite articles in APCs (see chapter 5).

There is no asymmetry between the presence or absence of definiteness markers in APCs, since both patterns are attested in (almost) equal numbers among languages with articles. However, the majority of languages with third person APCs lack definite articles (chapter 5 section 5.2). The pronominal determiner hypothesis predicts this occurrence of third person APCs when there is no definite article competing for the same position.

If the basis for the lack of third person APCs in languages with articles is the complementary distribution of articles and adnominal pronouns, languages that have definite articles and third person APCs should have no such complementary distribution. The relevant generalisation in (446) was discussed in chapter 5 section 5.2 alongside potential counterexamples.

(446) *Third person-article generalisation:*

If a language has third person APCs and definite articles, it has articles in APCs.

The structure of APCs involving a definite article has been argued to involve person and definiteness features located on distinct syntactic heads in chapter 4, a hypothesis I argued to be further supported by the unagreement phenomenon discussed in chapter 6. In this connection, I have shown that definite *xnPs* are not necessarily third person, contrary to common assumptions. While that assumption seems to hold for languages with pronominal determiners, it breaks down in languages where person is independent from definiteness.

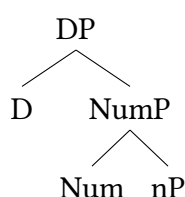
Another category often associated with personal pronouns is demonstrativity (see Blake 2001 and Choi 2014a,b; also chapter 6). The solid, albeit not absolute, correlation observed in chapter 2 between the order of adnominal pronouns and demonstratives relative to the head noun is in line with the hypothesis that they form a distributional class in many languages. However, languages where they occur in different positions relative to the head noun point to the possibility of a nominal structure where person and demonstrative features are encoded in distinct positions (see chapter 3 sections 3.2 and 3.4). Personal pronoun-demonstrative constructions/PPDCs (chapter 2 section 2.5 and chapter 7) also suggest that a dissociation between person and other deictic features represents a valid crosslinguistic point of variation. Finally, chapter 7 also addressed data indicating interactions between demonstrative features and grammatical person. In most cases, an analysis based on pragmatic compatibility seemed to be the most appropriate one.

8.2 Extremity of Person Hypothesis

An observation arising from the overview of the discussions in parts II and III is that person seems to be encoded in the highest “referential”, or possibly rather “anchoring” layer of the *xnP* in the majority of the languages investigated. The term anchoring may be understood as the process in which the denotation of an *xnP* is related to a discourse participant (or participants), see e.g. Ritter & Wiltschko (2009, 2014) and Wiltschko (2014) for further discussion of anchoring within a specific theoretical framework and the illustration in (448) for a sketch of the Universal Spine structure assumed there.² If adpositions indeed also form part of the *xnP* and are structurally higher than this “high” nominal person, the latter is not the highest projection of the *xnP* *per se*. But while adpositions normally describe an outward relation of the denotatum of an *xnP*, anchoring involves the highest part of an *xnP* involved with the establishment of its own denotation.³

The only clear alternative observed here to this “high person” pattern seems to be person encoded in the lowest part of the *xnP*, or possibly not encoded at all, notably in the “noun-like” pronouns of Japanese and Korean, see chapter 4 section 4.2 and chapter 7 section 7.1.1. Even on fairly minimal assumptions on nominal structure there would in principle be room for associating person with projections in between, notably the Num projection in (447). If the high position is identified with anchoring in Wiltschko’s (2014) Universal Spine illustrated in (448), there would also be the option of association with the lower point-of-view level – and possibly also the classification level, although this may correspond to the lowest part of the *xnP* just mentioned.⁴

(447)



²Wiltschko (2011) treats D as the anchoring category of nominals, with deicticity but also case as possible means of establishing anchoring. I leave the question of how case and person may interact with respect to anchoring to future research, but note that as I suggest here for person, case is also commonly analysed as occupying an extreme position in the *xnP*, e.g. Bittner & Hale (1996), Neeleman & Szendrői (2007).

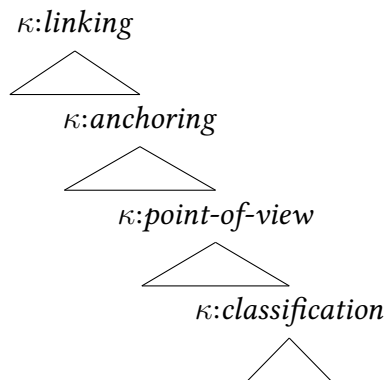
³Adpositions may correspond to the “linking” layer in Wiltschko’s (2014) terminology.

⁴ κ stands for a universal, i.e. not language-specific, category.

Conclusion

(448)

after Wiltschko 2014: 36



In a few languages, notably the Papuan languages Amele, Yagaria and Usan, adnominal personal pronouns are involved in marking number on *xnPs*. The discussion in chapter 3 section 3.3 suggests that at least in Amele and Yagaria the head hosting person and number features still seems to be in the highest anchoring position in these languages. The only language I have found where person may be found structurally below another anchoring-related projection is Usan. There, a personal pronoun can occur in the scope of a deictic marker. However, that deictic may have been reanalysed as part of a topic marker, which would arguably be related to linking, and it is not clear if such constructions are possible with full APCs (see chapter 3 section 3.3 and chapter 7 footnote 3 for discussion).

There were no cases of languages where person would be clearly located below other anchoring-related projections. This suggests that such patterns are at least rare – due to the general problem of obtaining negative evidence in studies of this sort (see chapter 2 section 2.1.1) the present data do not prove that the pattern is necessarily excluded. A strong hypothesis, which may be qualified or falsified by further research, would be that person occurs either in the left periphery of the *xnP* or at its core as formulated in the Extremity of person hypothesis in (449).

(449) *Extremity of Person Hypothesis:*

Non-possessive nominal person features are located either in the outer range of the anchoring-related left periphery or at the core of the *xnP*, i.e. on the categorial head *n* or, possibly, on an “inner head” in the domain of the categoriser.⁵

This does not directly apply to the languages with prenominal APCs and postpositions, where according to the analysis in chapter 3 adnominal pronouns realise a phrasal position. In the cases where these adnominal pronouns are specifiers they could undergo some variety of Spec-head agreement with the head hosting them, thereby leading to a representation of

⁵It is not clear if the core of the *xnP* corresponds to the classification layer in Wiltschko’s (2014) Universal Spine.

person features in the main projection line of the x_nP . In cases where adnominal pronouns are adjuncts, there would be no representation of person in the main projection line of the full x_nP , hence a possible counterexample to the assumption in (441a).

The next section provides a parametric perspective on some aspects of the variation observed in this thesis.

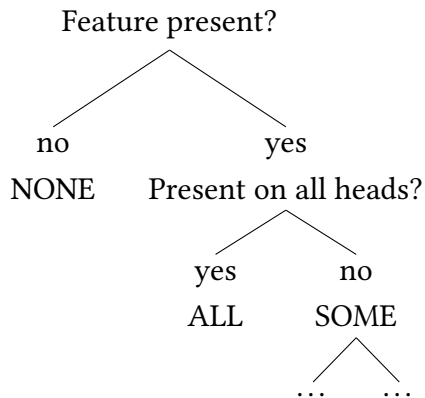
8.3 Parametric variation and outlook

In this section, I briefly discuss a sketch of how the general observations regarding the structural variation in the location of person features as well as the hypothesis (449) may be dealt with in the principles and parameters paradigm, particularly building on the idea of parametric hierarchies, see Biberauer et al. (2014b), Biberauer & Roberts (2015, 2016a,b), Biberauer et al. (2014c), Roberts (2012).

That research programme represents an attempt to bring together insights from the macro- and microparametric points of view. Retaining the basic hypothesis of the Borer-Chomsky-Conjecture (Borer 1986, Chomsky 1995), namely that parametric variation is related to the formal features on functional heads, the account suggests that syntactic parameters emerge from the way that underspecified aspects of a minimal UG are set in accordance with third factor principles (Chomsky 2008) that guide the acquisition of the feature inventory of a language, notably generalised versions of Feature Economy (Roberts & Roussou 2003) and Input Generalisation (Roberts 2007). The proposal is that parameters can be organised in hierarchies of ever more specific questions regarding the distribution and properties of formal features. Feature Economy prevents the assumption of formal features unless necessitated by the primary linguistic data, while Input Generalisation suggests that maximal use is made of a feature once its existence is assumed (Biberauer et al. 2014b, Biberauer & Roberts 2015, 2016a,b). The basic effect can be represented in the NONE-ALL-SOME model illustrated in (450). Concerning a potential formal feature the initial question is whether it is actually grammaticalised, guided by Feature Economy. If there is evidence that a feature is grammatically active, Input Generalisation demands that maximal use be made of it, so that its presence is assumed on all eligible syntactic heads. Subsequent empirical refinement restricts the feature to a subset of heads through a series of progressively more specific conditions.

Conclusion

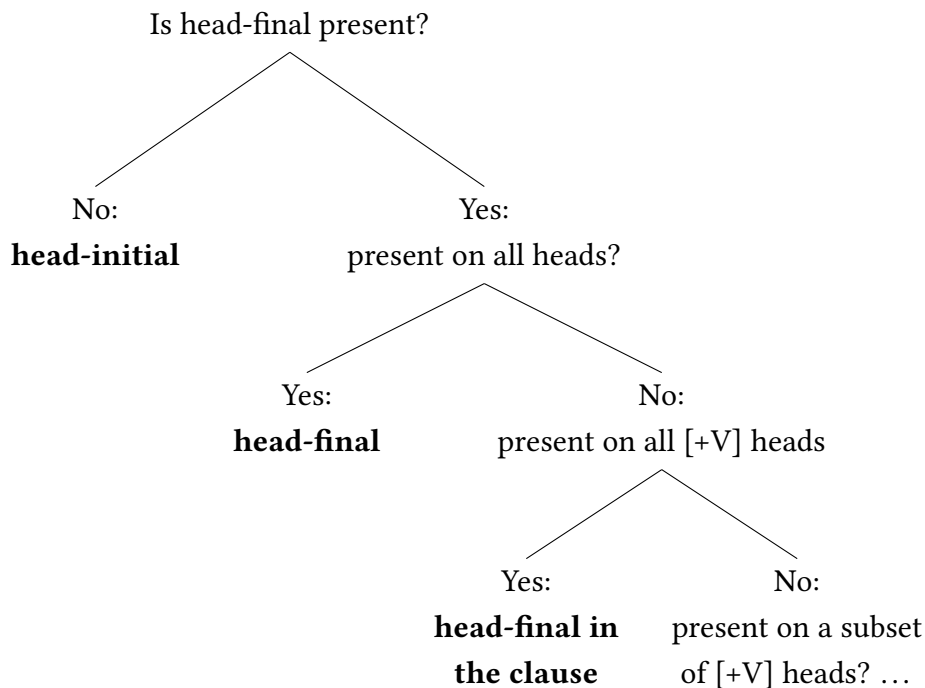
(450)



This NONE-ALL-SOME conception provides a useful framework for modelling the distribution of uninterpretable features. This is illustrated by the hierarchy in (451), which models variation in head-directionality by means of a head-final feature. Further examples of parameter hierarchies can be found, e.g., in Ledgeway (2013), Roberts & Holmberg (2010), and Sheehan (2014).

(451)

after Biberauer & Roberts 2015: 8, (7)



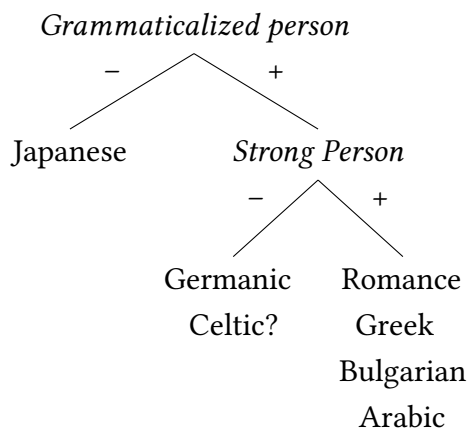
When it comes to the properties and distribution of interpretable features, however, it is not clear if or how the NONE-ALL-SOME scheme applies. The NONE option is unproblematic if it means that person features are not grammatically active in a language, as has been proposed, e.g. for Japanese (see for example Fukui 1987, Kuroda 1988, Longobardi 2008, Saito

2007). This setting implies a NONE setting for any parameter hierarchy determining the distribution of uninterpretable person features, too, because they could never be valued (or checked) in the absence of interpretable person features.

A more problematic question is to what extent the ALL and SOME options can apply to interpretable features. Assuming more than one set of interpretable grammatical person features for an *xnP* is conceptually not desirable (in fact, it is not clear what it would mean) and I have not been able to find evidence for such structures. For the few languages that at first sight seemed to contain two sets of person features alternative analyses turned out to be more likely, e.g. Khoekhoe in chapter 3 section 3.4.1 and some cases of PPDCs in chapter 7. I therefore presume that Roberts’s (2007) Input Generalisation does not apply to interpretable features and parameter hierarchies concerning their distribution consequently do not contain the ALL and SOME options. Before attempting to sketch a possible parameter hierarchy for the present data, consider a parameter proposed for the properties of person from a slightly different perspective.

Longobardi (2008) proposes the parametrisation of person in (452). Developing earlier work (among others Longobardi 1994, 2005) and adopting the view that “D is the Person head” (Longobardi 2008: 201, (37)), he suggests that languages where person is grammaticalised need to establish a relationship between N and D. In strong Person languages, this relationship needs to be reflected overtly, either by N-to-D movement or overt realisation of D (e.g. by an article), while this relationship may be established covertly in weak Person languages.

(452) Generalized *nominal mapping parameter* Longobardi 2008: 207, (51)



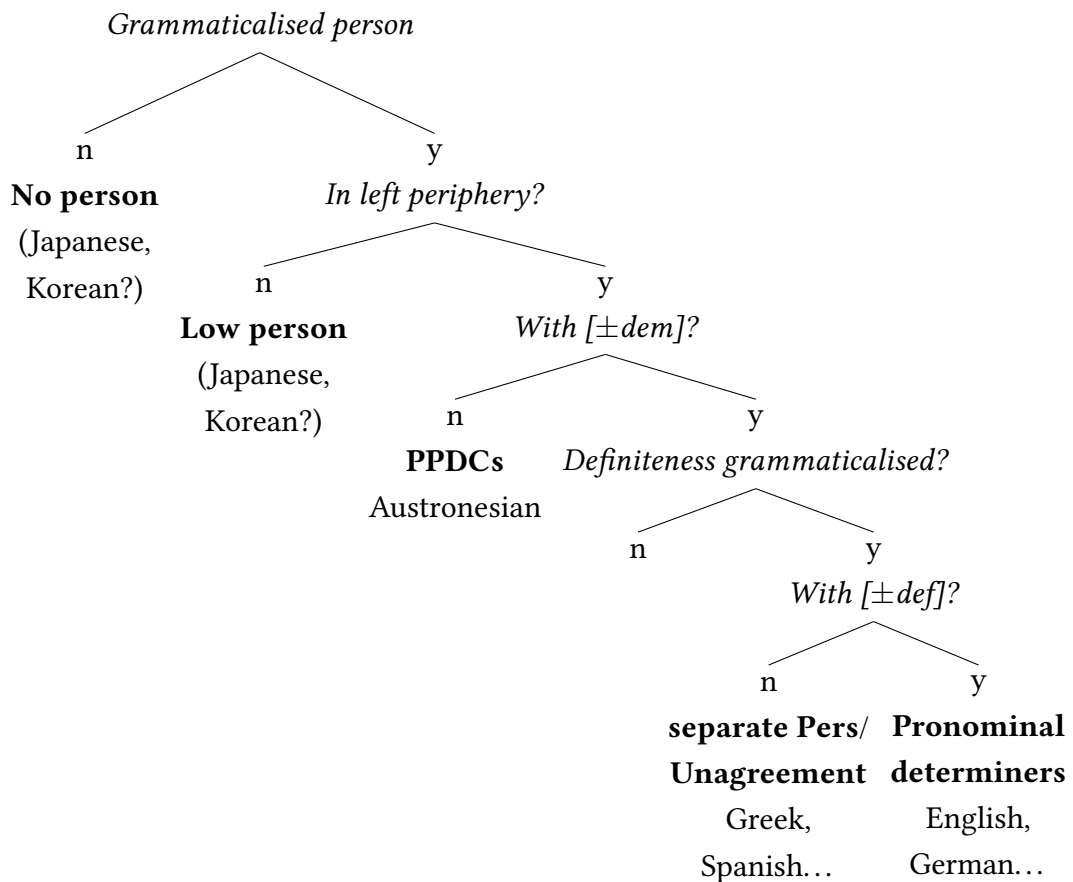
The identification of D as the person head is compatible with the Extremity of person hypothesis in (449), as person is assumed to be located high in the *xnP* or to be absent. However, much of the structural variation observed in APCs is outside the scope of (452). As noted by Höhn (2016), the class of strong person languages contains languages with and without unagreement and (452) does not provide a means to distinguish them. One reason for

Conclusion

this subset relation may be that strong person languages tend to have consistent null subjects (Longobardi 2008: 205), which was identified as a necessary but not sufficient condition for unagreement in chapter 6.

The proposal I submit for further consideration adopts a similar approach, but focuses on variation in the location of the person features. As illustrated in (453), the first question is identical to Longobardi's root question.

(453) Tentative parameter hierarchy for locus of nominal person



Indeed, if the hierarchy is considered to guide language acquisition, the first question would be 'virtual'. If language acquirers only pose the further questions if there is evidence that the feature is grammatically active (Theresa Biberauer, p.c.), the question would never get asked in contexts where the answer would be negative. It is also not entirely clear whether the negative answers to this and the second question actually have to be distinguished, but as mentioned earlier in the thesis, some languages may truly lack grammatical person, whereas others may encode it so low in the nominal domain that the person features are hardly accessible due to locality conditions, giving the impression of a lack of person in most contexts.

I do not decide between these options here. The remaining questions concern the relationship of person features to demonstrative and definiteness features.

The question whether definiteness is grammaticalised only becomes relevant for the distinction between languages with pronominal determiners and those with distinct encoding of person and definiteness. In actuality, it may represent the starting point for a distinct parameter hierarchy on definiteness features – and would therefore be a similarly ‘virtual’ question as the initial question about the grammaticalisation of person. However, the question seems to interact with the present hierarchy with the consequence that the class of languages with a negative answer to the final question also includes languages that simply lack a definite article altogether.

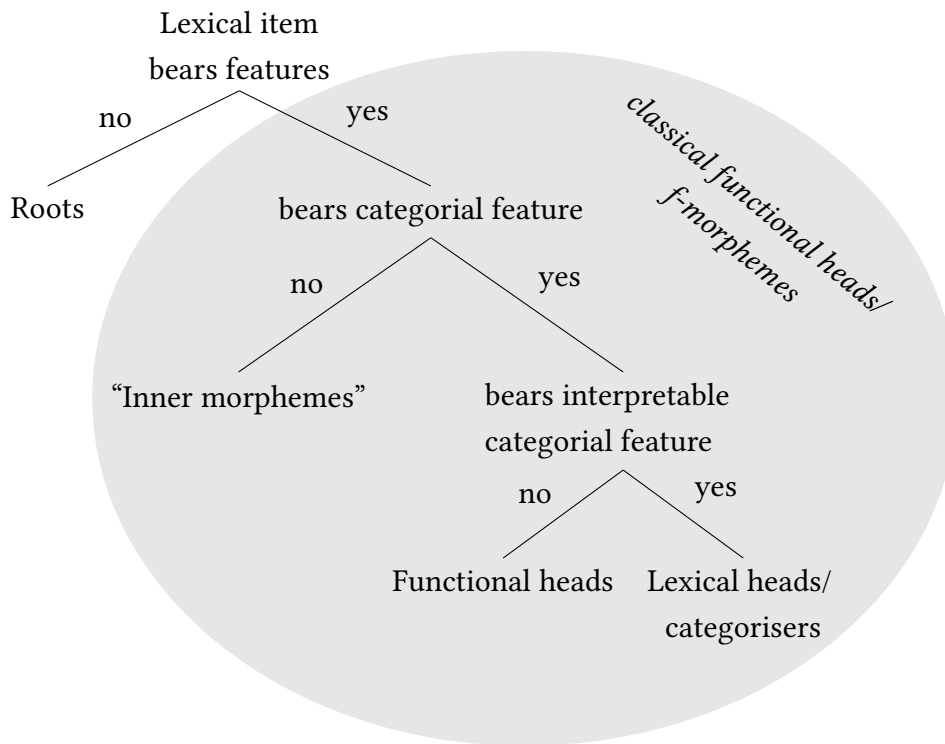
Due to the Extremity of person hypothesis, the person features are always located highest in the branches regarding the co-occurrence of person and $[\pm\text{dem}]$ and $[\pm\text{def}]$ if they do not cluster with the respective feature.

In part II I assumed the pronominal determiner analysis as the null hypothesis to detect patterns of nominal person requiring a different analysis. As noted on the outset of that part, this might imply a perspective on language acquisition where the pronominal determiner analysis is the default analysis for learners. I do not make this claim, which does not seem to be reflected in (453) either. A perspective that may be implicit in (454), however, is that the default assumption is for nominal person features (and possibly more generally features forming part of the spine of an extended projection) to be encoded on (and realised by) a head. Only consistent evidence that the relevant elements are not heads leads the learner to posit that the relevant morphemes realise a phrasal position instead. An example would be the potential violations of FOFC in languages with pronominal pronouns and postpositions.

For a final observation on this tentative parameter hierarchy, recall the ontology for the distinction of different types of syntactic heads discussed in chapter 1, repeated below from (17).

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(454) Representation of assumed ontology of syntactic elements



There appears to be an interaction between this and the parameter hierarchy in (453). The lower three options in the parameter hierarchy can only apply to functional heads, i.e. heads bearing uninterpretable categorial features. On the other hand, if the Extremity of person hypothesis is adopted, a negative answer to the question whether person is located in the left periphery implies that person is encoded very low in the x_nP , either on the categorial head n itself or even below it as an “Inner morpheme”.

The parameter hierarchy in (453) is, of course, merely a sketch at this point. It captures several core findings, but also leaves open many questions. On top of the issues already mentioned, the hierarchy has nothing to say about the interaction of person with (interpretable) number features that was observed in some, mostly Papuan languages, where adnominal pronouns also serve to mark number in x_nP s, see chapter 3 (e.g. Usan, Amele). Moreover, even though many of the languages with PPDCs discussed in chapter 7 do not have articles, for those that do, notably the Austronesian languages, the PPDC branch in (453) remains underspecified regarding the potential interaction of definiteness marking and demonstratives. As mentioned earlier, the question of whether definiteness is grammatically encoded may be a distinct parameter, but it is clear that it closely interacts with the person data discussed here.

This raises the wider question of how the observable variation in the structural position of person connects to recent proposals that variation in the grammatical “interpretation” of

person features is at the root of animacy and definiteness scales (Bárány 2015, Richards 2008). The animacy scale in (455) repeated from chapter 1 and the parallel definiteness scale in (456) illustrate how Richards (2008) suggests languages can vary in the specific interpretation assigned to a nominal expression marked as [+Person] versus one with [-Person] marking by selecting a particular cut-off point on a given hierarchy. [+Person] may be understood as a shorthand for the presence of a set of person specifications, while [-Person] may correspond to the absence of person features (see also Bárány 2015).

- (455) Person/animacy scale (after Richards 2008: 141, (4))
- | | | |
|---------------------------|---|--------------------------|
| [+Person] (=DP) | | [-Person] (=NP) |
| 1/2 pers. pron. > animate | > | inanimate |
| (3-person, pronoun/noun) | | (3-person, pronoun/noun) |
- ← (likelihood/obligatoriness of) animacy

- (456) Person/definiteness scale (after Richards 2008: 141, (5))
- | | | |
|--|---|-----------------|
| [+Person] (=DP) | | [-Person] (=NP) |
| 1/2 pers. pronoun > 3-person (pron.) > definite > specific | > | nonspecific |
- ← (likelihood/obligatoriness of) definiteness

The definiteness scale seems to be compatible with a core aspect of the pronominal determiner hypothesis, namely that definite articles in languages like English correspond to adnominal third person pronouns (see chapter 5). It also provides an interesting perspective on the use of third person pronouns as determiners in a range of languages, see chapter 2 section 2.4.1 and Louagie & Verstraete (2015). However, while the reduction of definiteness to person seems plausible in such cases, it raises problems for the languages where definiteness markers co-occur with adnominal pronouns. In particular, the possibility of quantificational unagreement discussed in chapter 4 and the account of unagreement proposed in chapter 6 suggest that distinct formal representations of person and definiteness should at least be possible (see also Bernstein 2008b for the view that person and definiteness are distinct).

In conclusion, there is a range of open questions concerning how person interacts with or is employed in other grammatical phenomena such as animacy or definiteness, which may involve the co-optation of person features as expressions of those grammatical features as Richards suggests or crosslinguistic variation as to which other features are encoded on the same head as person, as suggested by the tentative parameter hierarchy in (453).

Bibliography

- Abels, Klaus & Ad Neeleman. 2012. Linear asymmetries and the LCA. *Syntax* 15. 25–74.
- Abney, Steven. 1987. *The English noun phrase in its sentential aspect*. MIT dissertation.
- Ackema, Peter & Ad Neeleman. 2013. Subset controllers in agreement relations. *Morphology* 23. 291–323.
- Acquaviva, Paolo. 2009. Roots and lexicality in distributed morphology. In Alexandra Galani, Daniel Redinger & Norman Yeo (eds.), *York Papers in Linguistics Series 2 special issue – York-Essex Morphology Meeting*, 1–21. York: University of York. http://www.york.ac.uk/language/ypl/ypl2issue10/YPL10_YEMM_01_Acquaviva.pdf.
- Adamou, Evangelia. 2011. Temporal uses of definite articles and demonstratives in Pomak (Slavic, Greece). *Lingua* 121. 871–889.
- Aikhenvald, Alexandra Y. 2008. *The Manambu language of East Sepik, Papua New Guinea*. Oxford: Oxford University Press.
- Alexiadou, Artemis & Elena Anagnostopoulou. 1998. Parametrizing Agr: Word order, V-movement and EPP-checking. *Natural Language and Linguistic Theory* 16. 491–539.
- Alexiadou, Artemis, Liliane Haegeman & Melita Stavrou. 2007. *Noun phrase in the generative perspective*. Berlin, New York: de Gruyter.
- Álvarez, Rosario, Henrique Monteagudo & Xosé Luis Regueira. 1986. *Gramática Galega*. Vigo: Editorial Galaxia.
- Anderson, Stephen R. & Edward L. Keenan. 1985. Deixis. In Timothy Shopen (ed.), *Language typology and syntactic description. Grammatical categories and the lexicon (Volume III)*, vol. 3, 259–308. Cambridge: Cambridge University Press.
- Andrews, J. Richard. 1975. *Introduction to classical Nahuatl*. Austin, London: University of Texas Press.
- Areta, Mikel Martínez. 2009. The category of number in Basque: I. Synchronic and historical aspects. *Fontes Linguae Vasconum* 110. 63–98.
- Arregi, Karlos & Andrew Nevins. 2012a. *Morphotactics: Basque auxiliaries and the structure of spellout*. Dordrecht: Springer.

Bibliography

- Arregi, Karlos & Andrew Ira Nevins. 2012b. Contextual neutralization and the Elsewhere Principle. To appear in a volume edited by Alec Marantz and Ora Matushansky. <http://ling.auf.net/lingbuzz/001690>.
- Artiagoitia, Xabier. 2012. The DP hypothesis in the grammar of Basque. In Urtzi Etxeberria, Ricardo Etxepare & Myriam Uribe-Etxebarria (eds.), *Noun phrases and nominalization in Basque: Syntax and semantics*, 21–77. Amsterdam: John Benjamins.
- Asbury, Anna. 2008. *The morphosyntax of case and adpositions*. University of Utrecht dissertation.
- Asher, R. E.. 1985. *Tamil*. Beckenham: Croom Helm.
- Asher, R. E. & T. C. Kumari. 1997. *Malayalam*. London: Routledge.
- Austin, Peter. 1981. *A grammar of Diyari, South Australia*. Cambridge: Cambridge University Press.
- Baker, Mark C. 1996. *The polysynthesis parameter*. Oxford, New York: Oxford University Press.
- Baker, Mark C. 2008. The macroparameter in a microparametric world. In Theresa Biberauer (ed.), *The limits of syntactic variation*, 351–374. Amsterdam: John Benjamins.
- Bárány, András. 2015. *Differential object marking in Hungarian and the morphosyntax of case and agreement*. Downing College, University of Cambridge dissertation.
- Barbosa, Maria do Pilar Pereira. 1995. *Null subjects*. MIT dissertation.
- Barbosa, Maria do Pilar Pereira. 2013. Pro as a minimal NP: Towards a unified approach to pro-drop. Ms., Universidade do Minho. <http://ling.auf.net/lingbuzz/001949>.
- Bauer, Winifred. 1993. *Maori*. London: Routledge.
- Bauer, Winifred. 1997. *The Reed reference grammar of Māori*. Auckland: Reed Books.
- Baxter, Alan N. 1988. *A grammar of Kristang (Malacca Creole Portuguese)* (Pacific Linguistics 95). Canberra: The Australian National University.
- Becker, Richard A., Allan R. Wilks & Ray Brownrigg. 2016. *mapdata: Extra map databases*. <https://CRAN.R-project.org/package=mapdata>. R package version 2.2-6; Original S code by Richard A. Becker and Allan R. Wilks. R version by Ray Brownrigg.
- Beis, Stamatís. 2000. *Le parler Aroumain de Metsovo. Description d'une langue en voie de disparition*. Université Paris V - René Descartes dissertation.
- Benveniste, Emile. 1971. The nature of pronouns. In *Problems in general linguistics*, 217–222. Coral Gables (FL): University of Miami Press.
- Bernstein, Judy B. 2008a. English *th*-forms. In Henrik Høeg Müller & Alex Klinge (eds.), *Essays on nominal determination*, 213–232. Amsterdam, Philadelphia: John Benjamins.

- Bernstein, Judy B. 2008b. Reformulating the determiner phrase analysis. *Language and Linguistics Compass* 2(6). 1246–1270.
- Besnier, Niko. 2000. *Tuvaluan*. London: Routledge.
- Bhatia, Tej K. 1993. *Punjabi*. London: Routledge.
- Biberauer, Theresa, Anders Holmberg & Ian Roberts. 2008. Structure and linearization in disharmonic word orders. In Charles B. Yang & Hannah J. Haynie (eds.), *Proceedings of the 26th West Coast Conference on Formal Linguistics*, 96–104. Somerville (MA): Cascadilla Proceedings Project.
- Biberauer, Theresa, Anders Holmberg & Ian Roberts. 2014a. A syntactic universal and its consequences. *Linguistic Inquiry* 45(2). 169–225.
- Biberauer, Theresa, Anders Holmberg, Ian Roberts & Michelle Sheehan. 2014b. Complexity in comparative syntax: the view from modern parametric theory. In Fritz Newmeyer & Laurel Preston (eds.), *Measuring linguistic complexity*, 102–127. Oxford: Oxford University Press.
- Biberauer, Theresa & Ian Roberts. 2015. Rethinking formal hierarchies: a proposed unification. In James Chancharu & Moreno Mitrović (eds.), *Cambridge Occasional Papers in Linguistics (COPiL)*, vol. 7, 1–31. Cambridge: University of Cambridge, Department of Theoretical and Applied Linguistics.
- Biberauer, Theresa & Ian Roberts. 2016a. Parameter setting. In Adam Ledgeway & Ian Roberts (eds.), *The Cambridge Handbook of Historical Syntax*, 134–162. Cambridge: Cambridge University Press.
- Biberauer, Theresa & Ian Roberts. 2016b. Parameter typology from a diachronic perspective: the case of Conditional Inversion. In E. Bidese, F. Cognola & M. Moroni (eds.), *Theoretical approaches to linguistic variation*, 259–291. Amsterdam: John Benjamins.
- Biberauer, Theresa, Ian Roberts & Michelle Sheehan. 2014c. No-choice parameters and the limits of syntactic variation. In R. Santana-LaBarge (ed.), *Proceedings of WCCFL 31*, 46–55. Somerville (MA): Cascadilla Press.
- Biberauer, Theresa & Michelle Sheehan (eds.). 2013. *Theoretical approaches to disharmonic word order*. Oxford: Oxford University Press.
- Bierwisch, Manfred. 1967. Syntactic features in morphology: General problems of so-called pronominal inflection in German. In *To honour Roman Jakobson*, 239–270. The Hague: Mouton.
- Bittner, Maria & Ken Hale. 1996. The structural determination of case and agreement. *Linguistic Inquiry* 27. 1–68.
- Blake, Barry J. 2001. The noun phrase in Australian languages. In Jane Simpson, David Nash, Mary Laughren, Peter Austin & Barry Alpher (eds.), *Forty years on. Ken Hale and Australian languages*, 415–425. Canberra: Pacific Linguistics.

Bibliography

- Bobaljik, Jonathan David. 2000. The ins and outs of contextual allomorphy. In K. Grohmann & C. Struijke (eds.), *University of Maryland Working Papers in Linguistics*, 35–71. University of Maryland.
- Bobaljik, Jonathan David. 2002. Syncretism without paradigms: Remarks on Williams 1981, 1994. In Geert Booij & Jaap van Marle (eds.), *Yearbook of Morphology 2001*, 53–85. Dordrecht: Kluwer.
- Bobaljik, Jonathan David. 2008. Paradigms, optimal and otherwise: A case for skepticism. In Asaf Bachrach & Andrew Nevins (eds.), *Inflectional identity*, 29–54. Oxford: Oxford University Press.
- Bobaljik, Jonathan David. 2012. *Universals in comparative morphology. Suppletion, superlatives, and the structure of words*. Cambridge (MA): MIT Press.
- Bobaljik, Jonathan David. to appear. Distributed morphology. In Andrew Spencer (ed.), *Handbook of morphology*, London: Wiley-Blackwell.
- Bobaljik, Jonathan David & Höskuldur Thráinsson. 1998. Two heads aren't always better than one. *Syntax* 1(1). 37–71.
- Borer, Hagit. 1986. I-subjects. *Linguistic Inquiry* 17. 375–416.
- Borer, Hagit. 1989. Anaphoric agr. In Osvaldo Jaeggli & Kenneth Safir (eds.), *The null subject parameter*, 69–110. Dordrecht: Kluwer.
- Borer, Hagit. 2005. *Structuring sense volume I: In name only*. Oxford: Oxford University Press.
- Borer, Hagit. 2013. *Structuring sense volume III: Taking form*. Oxford: Oxford University Press.
- Borg, Albert & Marie Azzopardi-Alexander. 1997. *Maltese*. London: Routledge.
- Borg, Alexander. 2004. *A comparative glossary of Cypriot Maronite Arabic*. Leiden: Brill.
- Borsley, Robert D. 1999. Mutation and constituent structure in Welsh. *Lingua* 109. 267–300.
- Borsley, Robert D. & Maggie Tallerman. 1998. Phrases and soft mutation in Welsh. *Journal of Celtic Linguistics* 5. 1–33.
- Bosch, Peter, Graham Katz & Carla Umbach. 2007. The non-subject bias of German demonstrative pronouns. In Monika Schwarz-Friesel, Manfred Consten & Mareile Knees (eds.), *Anaphors in text: Cognitive, formal and applied approaches to anaphoric reference*, 145–164. John Benjamins.
- Bosch, Peter, Tom Rozario & Yufan Zhao. 2003. Demonstrative pronouns and personal pronouns. German *der* vs. *er*. In *Proceedings of the EACL2003*, Quoted after manuscript version available on <http://homepages.abdn.ac.uk/k.vdeemter/pages/bosch.pdf>, accessed 27 November 2015.

- Bosch, Peter & Carla Umbach. 2007. Reference determination for demonstrative pronouns. In Dagmar Bittner & Natalia Gargarina (eds.), *Intersentential pronominal reference in child and adult language* (ZAS Papers in Linguistics 48), 39–51. Berlin: Zentrum für Allgemeine Sprachwissenschaft.
- Bosque, Ignacio & Joan-Carlos Moreno. 1984. A condition on quantifiers in Logical Form. *Linguistic Inquiry* 15. 164–167.
- Bošković, Željko. 2008. What will you have, DP or NP? In *Proceedings of NELS 37*, Amherst: GLSA.
- Bošković, Željko. 2009. More on the no-DP analysis of article-less languages. *Studia Linguistica* 63(2). 187–203.
- Bošković, Željko. 2012. On NPs and clauses. In Günther Grewendorf & Thomas Ede Zimmermann (eds.), *Discourse and grammar: From sentence types to lexical categories*, 179–247. Berlin: de Gruyter.
- Bošković, Željko. 2015. On second position clitics crosslinguistically. Ms., University of Connecticut. Available on <http://web.uconn.edu/boskovic/OresnikCliticsReferences.pdf>, accessed 15 February 2016.
- Bošković, Željko & I-Ta Chris Hsieh. 2013. On word order, binding relations, and plurality in Chinese noun phrases. *Studies in Polish Linguistics* 8. 173–204.
- Bowe, Heather J. 1990. *Categories, constituents and constituent order in Pitjantjatjara. An Aboriginal language of Australia*. London: Routledge.
- Bresnan, Joan. 2001. *Lexical-functional syntax*. Malden (MA): Blackwell.
- Bruce, Les. 1984. *The Alamlak language of Papua New Guinea (East Sepik)*. Canberra: The Australian National University.
- Burton-Roberts, Noel. 1975. Nominal apposition. *Foundations of Language* 13. 391–419.
- Böhm, Gerhard. 1985. *Khoe-kowap. Einführung in die Sprache der Hottentotten, Nama-Dialekt*. Wien: Afro-pub.
- Bühler, Karl. 1934. *Sprachtheorie: Die Darstellungsfunktion der Sprache*. Jena.
- Caha, Pavel. 2009. *The nanosyntax of case*. University of Tromsø dissertation.
- Campbell, Richard. 1996. Specific operators in SpecDP. *Studia Linguistica* 50(2). 161–188.
- Campos, Héctor. 2005. Noun modification, pseudo-articles, and last resort operations in Arvantovlaxika and in Romanian. *Lingua* 115. 311–347.
- Cardinaletti, Anna. 1994. On the internal structure of pronominal DPs. *The Linguistic Review* 11. 195–219.
- Cardinaletti, Anna & Michal Starke. 1999a. Reply to comments: Responses and demonstratives. In Henk van Riemsdijk (ed.), *Clitics in the languages of Europe*, 273–290. Amsterdam: John Benjamins.

Bibliography

- Cardinaletti, Anna & Michal Starke. 1999b. The typology of structural deficiency: A case study of the three classes of pronouns. In Henk van Riemsdijk (ed.), *Clitics in the languages of Europe*, 145–233. Berlin, New York: Mouton de Gruyter.
- Carlson, Robert. 1994. *A grammar of Supyire*. Berlin: Mouton de Gruyter.
- Cheng, Lisa Lai-Shen & Rint Sybesma. 1999. Bare and not-so-bare nouns and the structure of NP. *Linguistic Inquiry* 30(4). 509–542.
- Cheung, Candice Chi Hang. 2012. Adjectival modification in Mandarin: Evidence for the adjunction analysis. *Studies in Chinese Linguistics* 33(1). 41–62.
- Chierchia, Gennaro. 1998. Reference to kinds across languages. *Natural Language Semantics* 6. 339–405.
- Choi, Jaehoon. 2013. Pro-drop in pronoun-noun constructions. In Stefan Keine & Shayne Sloggett (eds.), *NELS 42: Proceedings of the 42nd meeting of the North East Linguistic Society*, 119–128. Amherst (MA): GLSA.
- Choi, Jaehoon. 2014a. The locus of person feature and agreement. In Hsin-Lun Huang, Ethan Poola & Amanda Rysling (eds.), *NELS 43: Proceedings of the 43rd meeting of the North East Linguistic Society*, 65–76. Amherst (MA): GLSA.
- Choi, Jaehoon. 2014b. *Pronoun-noun constructions and the syntax of DP*. University of Arizona dissertation.
- Chomsky, Noam. 1995. *The minimalist program*. Cambridge (MA), London: MIT Press.
- Chomsky, Noam. 2000. Minimalist inquiries: The framework. In Roger Martin, David Michaels & Juan Uriagereka (eds.), *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*, 89–151. Cambridge (MA): MIT Press.
- Chomsky, Noam. 2001. Derivation by phase. In Michael Kenstowicz (ed.), *Ken Hale. A life in language*, 1–52. Cambridge (MA), London: MIT Press.
- Chomsky, Noam. 2004. Beyond explanatory adequacy. In Adriana Belletti (ed.), *Structures and beyond: The cartography of syntactic structures*, vol. 3, chap. 3, 104–131. Oxford, New York: Oxford University Press.
- Chomsky, Noam. 2008. On phases. In R. Freidin, C. Otero & M. L. Zubizarreta (eds.), *Foundational issues in linguistic theory*, 133–166. Cambridge (MA): MIT Press.
- Cinque, Guglielmo. 1999. *Adverbs and functional heads*. Oxford, New York: Oxford University Press.
- Cinque, Guglielmo. 2005. Deriving Greenberg's Universal 20 and its exceptions. *Linguistic Inquiry* 36. 315–332.
- Cinque, Guglielmo. 2013. Word-order typology: a change of perspective. In Theresa Biberauer & Michelle Sheehan (eds.), *Theoretical approaches to disharmonic word orders*, 47–73. Oxford: Oxford University Press.

- Collins, Chris (ed.). 2014a. *Cross-linguistic studies of imposters and pronominal agreement*. Oxford: Oxford University Press.
- Collins, Chris. 2014b. Introduction. In Chris Collins (ed.), *Cross-linguistic studies of imposters and pronominal agreement*, chap. 1. Oxford: Oxford University Press.
- Collins, Chris & Paul Postal. 2012. *Imposters: A study in pronominal agreement*. Cambridge (MA): MIT Press.
- Comrie, Bernard. 2000. Pragmatic binding: Demonstratives as anaphors in dutch. In Matthew L. Judge & Jeri L. Moxley (eds.), *Proceedings of the twenty-third annual meeting of the berkeley linguistics society: General session and parasession on pragmatics and grammatical structure (1997)*, 50–61. Berkeley: Berkeley Linguistics Society.
- Comrie, Bernard & Norval Smith. 1977. Lingua descriptive studies: Questionnaire. *Lingua* 42(1). 1–72.
- Corbett, Greville G. 2006. *Agreement*. Cambridge: Cambridge University Press.
- Cornilescu, Alexandra & Alexandru Nicolae. 2014. Classifying pronouns: The view from Romanian. *Bucharest Working Papers in Linguistics* (1). 5–33.
- Corver, Norbert. 2008. Uniformity and diversity in the syntax of evaluative vocatives. *Journal of Comparative Germanic Linguistics* 11(1). 43–93.
- Costa, João & Sandra Pereira. 2013. *a gente*: pronominal status and agreement revisited. *The Linguistic Review* 30. 161–184.
- Coulmas, Florian. 1982. Some remarks on Japanese deictics. In Jürgen Weissenborn & Wolfgang Klein (eds.), *Here and there. Cross-linguistic studies on deixis and demonstration*, 209–221. Amsterdam: John Benjamins.
- Culbertson, Jennifer. 2010. Convergent evidence for categorial change in French: From subject clitic to agreement marker. *Language* 86. 85–132.
- Dahmen, Wolfgang. 2005. Die Aromunen heute – eine Volksgruppe in der Identitätskrise? *Südosteuropa Mitteilungen* 02/2005. 66–77.
- Danon, Gabi. 2001. Syntactic definiteness in the grammar of Modern Hebrew. *Linguistics* 39(6). 1071–1116.
- Danon, Gabi. 2008. Definiteness spreading in the Hebrew construct state. *Lingua* 118. 872–906.
- Danon, Gabi. 2010. The definiteness feature at the syntax–semantics interface. In Anna Kibort & Greville G. Corbett (eds.), *Features. Perspectives on a key notion in linguistics*, 143–165. Oxford: Oxford University Press.
- Davies, John. 1989. *Kobon*. Croom Helm. Reprint of 1981 first edition.
- Davies, William D. 2010. *A grammar of Madurese*. Berlin: de Gruyter.

Bibliography

- De Belder, Marijke. 2011. *Roots and affixes. Eliminating lexical categories from syntax*. Utrecht: LOT.
- de Bruyne, Jacques. 1995. *A comprehensive Spanish grammar*. Malden (MA), Oxford: Blackwell. Adapted with additional material by Christopher J. Pountain.
- de Rijk, Rudolf P.G. 1998. Studies in Basque syntax: Relative clauses. In *De lingua vasconum: Selected writings*, 71–149. Vitoria-Gasteiz: Euskal Herriko Unibertsitatea. Reprint of 1972 MIT dissertation.
- de Rijk, Rudolf P.G. 2008. *Standard Basque: A progressive grammar*. Cambridge (MA): MIT Press.
- Delorme, Evelyn & Ray C. Dougherty. 1972. Appositive NP constructions. *Foundations of Language* 8. 2–29.
- Dempwolff, Otto. 1934/35. Einführung in die Sprache der Nama-Hottentotten. *Zeitschrift für Eingeborenen-Sprachen* XXV. 30–66, 89–134, 188–229.
- den Dikken, Marcel. 2001. “Plurilinguals”, pronouns and quirky agreement. *The Linguistic Review* 18. 19–41.
- den Dikken, Marcel. 2006. *Relators and linkers. The syntax of predication, predicate inversion, and copulas* (Linguistic Inquiry Monographs 47). Cambridge (MA), London: MIT Press.
- den Dikken, Marcel & Pornsiri Singhapreecha. 2004. Complex noun phrases and linkers. *Syntax* 7. 1–54.
- Derbyshire, Desmond C. 1979. *Hixkaryana*. Amsterdam: North-Holland Publishing Company.
- Diessel, Holger. 1999. *Demonstratives. Form, function, and grammaticalization*. Amsterdam: John Benjamins.
- Dobrovie-Sorin, Carmen & Ion Giurgea. 2006. The suffixation of definite articles in Balkan languages. *Revue roumaine de linguistique* 1. 73–103.
- Dooley Collberg, Sheila. 1997. Determiners and incorporation in Maori. In *Working papers in linguistics*, vol. 46, 25–44. Lund University, Department of Linguistics.
- Douglas, Jamie A. 2015. Agreement (and disagreement) among relatives. In James N. Chancharu, Xuhui Freddy Hu & Moreno Mitrović (eds.), *Cambridge Occasional Papers in Linguistics (COPiL)*, vol. 7, 33–60. Cambridge: University of Cambridge, Department of Theoretical and Applied Linguistics.
- Dryer, Matthew S. 1989. Large linguistic areas and language sampling. *Studies in Language* 13(2). 257–292.
- Dryer, Matthew S. 2013. Order of demonstrative and noun. In Matthew S. Dryer & Martin Haspelmath (eds.), *The world atlas of language structures online*, chap. 88. Leipzig: Max Planck Institute for Evolutionary Anthropology. <http://wals.info/chapter/88>.

- Dryer, Matthew S. & Martin Haspelmath (eds.). 2013. *Wals online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. <http://wals.info/>.
- Du Feu, Veronica. 1996. *Rapanui*. Routledge.
- Dudley, Rachel. 2014. Spanish imposters and verbal agreement. In Chris Collins (ed.), *Cross-linguistic studies of imposters and pronominal agreement*, 42–70. Oxford: Oxford University Press.
- Déchine, Rose-Marie & Martina Wiltschko. 2002. Decomposing pronouns. *Linguistic Inquiry* 33(3). 409–442.
- Dékány, Éva Katalin. 2011. *A profile of the Hungarian DP. The interaction of lexicalization, agreement and linearization with the functional sequence*. University of Tromsø dissertation.
- Elbourne, Paul. 2005. *Situations and individuals*. Cambridge (MA): MIT Press.
- Embick, David. 1997. *Voice and the interfaces of syntax*. University of Pennsylvania, Philadelphia dissertation.
- Embick, David. 2007. Linearization and local dislocation: Derivational mechanics and interactions. *Linguistic Analysis* 33(3-4). 303–336.
- Embick, David. 2010. *Localism versus globalism in morphology and phonology*. Cambridge (MA): MIT Press.
- Embick, David. 2012. On the targets of phonological realization. Talk presented at the Workshop on Locality and Directionality at the Morphosyntax-Phonology-Interface, 12–14 October 2012, Stanford University.
- Embick, David & Alec Marantz. 2008. Architecture and blocking. *Linguistic Inquiry* 39. 1–53.
- Embick, David & Rolf Noyer. 2001. Movement operations after syntax. *Linguistic Inquiry* 32(4). 555–595.
- Engel, Ulrich. 1996. *Deutsche Grammatik*. Julius Groos Verlag.
- Evans, Nicholas D. 1995. *A grammar of Kayardild*. Berlin: Mouton de Gruyter.
- Everett, Dan & Barbara Kern. 1997. *Wari'*. London: Routledge.
- Ewing, Michael C. 2005. Colloquial Indonesian. In Alexander Adelaar & Nikolaus P. Himmelmann (eds.), *The Austronesian languages of Asia and Madagascar*, 227–258. London: Routledge.
- Faraclas, Nicholas G. 1996. *Nigerian Pidgin*. London: Routledge.
- Fassi-Fehri, Abdelkader. 1999. Arabic modifying adjectives and DP structures. *Studia Linguistica* 53(2). 105–154.
- Feldman, Harry. 1986. *A grammar of Awtuw* (Pacific Linguistics 94). Canberra: The Australian National University.

Bibliography

- Felix, Sascha. 1990. The structure of functional categories. *Linguistische Berichte* 125. 46–71.
- Fortescue, Michael. 1984. *West Greenlandic*. Beckenham: Croom Helm.
- Fox, Danny. 2002. Antecedent-contained deletion and the copy theory of movement. *Linguistic Inquiry* 33(1). 63–96.
- Frajzyngier, Zygmunt. 1993. *A grammar of Mupun*. Berlin: Dietrich Reimer Verlag.
- Franco, Jon. 2000. Agreement as a continuum: The case of Spanish pronominal clitics. In Frits Beukma & Marcel den Dikken (eds.), *Clitic phenomena in European languages*, 147–189. Amsterdam: John Benjamins.
- Friedman, Victor A. 2002. *Macedonian*. Munich: Lincom Europa.
- Fukui, Naoki. 1987. *Theory of projection in syntax*. Stanford (CA): CSLI Publications.
- Furuya, Kaori. 2008. DP hypothesis for Japanese “bare” noun phrases. In Łukasz Abramowicz, Stefanie Brody, Toni Cook, Ariel Diertani, Aviad Eilam, Keelan Evanini, Kyle Gorman, Laurel MacKenzie & Joshua Tauberer (eds.), *University of Pennsylvania Working Papers in Linguistics. Proceedings of the 31st Annual Penn Linguistics Colloquium*, vol. 14 1, 149–162. Philadelphia: University of Pennsylvania.
- Gary, Judith Olmsted & Gamal-Eldin. 1982. *Cairene Egyptian Colloquial Arabic*. London: Croom Helm.
- Giorgi, Alessandra & Fabio Pianesi. 1997. *Tense and aspect*. Oxford: Oxford University Press.
- Grice, H. Paul. 1975. Logic and conversation. In P. Cole & J. L. Morgan (eds.), *Syntax and semantics 3: Speech acts*, 41–58. New York: Academic Press.
- Grimshaw, Jane. 2005. Extended projection. In *Words and structure*, chap. 1, 1–71. Stanford: CSLI Publications. Revision of the 1991 manuscript.
- Gröndahl, Tommi. 2015a. The DP-structure of the Finnish noun phrase. Presentation at the XIIIth International Congress for Finno-Ugric Studies (CIFU XII), 19 August 2015, Oulu.
- Gröndahl, Tommi. 2015b. *Määräisyys funktionaalisenä pääsanana suomen kielen nominausekkeessa (Definiteness as a functional head in the Finnish noun phrase)*. Helsinki MA thesis.
- Haacke, Wilfrid H. G. 2013. Morphology. Namibian Khokoe (Nama/Damara). In Rainer Vossen (ed.), *The Khoesan languages*, 141–151. London: Routledge.
- Haacke, Wilfrid Heinrich Gerhard. 1976. *A Nama grammar: the noun-phrase*. University of Cape Town MA thesis.
- Haacke, Wilfrid Heinrich Gerhard. 1977. The so-called “personal pronoun” in Nama. In Anthony Traill (ed.), *Khoisan linguistic studies* 3, 43–62. Johannesburg: African Studies Institute.
- Haiman, John. 1980. *Hua: A Papuan language of the Eastern Highlands of New Guinea*. Amsterdam: John Benjamins.

- Hale, Ken. 1973. Person marking in Warlpiri. In Stephen R. Anderson & Paul Kiparsky (eds.), *Festschrift for Morris Halle*, 308–344. New York: Holt, Rinehart and Winston.
- Hale, Kenneth. 1983. Warlpiri and the grammar of non-configurational languages. *Natural Language and Linguistic Theory* 1. 5–74.
- Hall, David. 2012. *The glasses's old man – noun modification and case in Japanese*. Queen Mary, University of London MA thesis.
- Halle, Morris. 1997. Distributed morphology: Impoverishment and fission. In Benjamin Bruening, Yoonjung Kang & Martha McGinnis (eds.), *MITWPL 30: Papers at the interface*, 425–449. Cambridge (MA): MIT Working Papers in Linguistics.
- Halle, Morris & Alec Marantz. 1993. Distributed Morphology and the pieces of inflection. In Kenneth Hale & Samuel Jay Keyser (eds.), *The View from Building 20*, 111–176. Cambridge (MA): MIT Press.
- Hammarström, Harald, Robert Forkel, Martin Haspelmath & Sebastian Bank. 2016. *Glottolog 2.7*. Max Planck Institute for the Science of Human History Jena. Available online at <http://glottolog.org>, accessed on 20 December 2016.
- Hankamer, Jorge & Line Mikkelsen. 2005. When movement must be blocked: A reply to Embick and Noyer. *Linguistic Inquiry* 36(1). 85–125.
- Harbour, Daniel. 2016. *Impossible persons*. Cambridge (MA): MIT Press.
- Harley, Heidi. 2005. Bare phrase structure, acategorial roots, one-replacement and unaccusativity. In Slava Gorbachov & Andrew Nevins (eds.), *Harvard working papers on linguistics*, vol. 9, Quoted after 2007 version “Bare Phrase Structure, Acategorial Roots, one-replacement and unaccusativity” available on <http://ling.auf.net/lingbuzz/000341>, accessed 12 January 2016.
- Harley, Heidi. 2007. One-replacement, unaccusativity, acategorial roots and bare phrase structure. Manuscript available at <http://ling.auf.net/lingbuzz/000341>, accessed 23 November 2015.
- Harley, Heidi & Rolf Noyer. 1999. State-of-the-article: Distributed morphology. *GLOT* 4(4). 3–9.
- Harley, Heidi & Elizabeth Ritter. 2002. Person and number in pronouns: A feature-geometric analysis. *Language* 78(3). pp. 482–526.
- Harlow, Steve. 1989. The syntax of Welsh soft mutation. *Natural Language & Linguistic Theory* 7. 289–316.
- Harris, Martin. 1991. Demonstrative adjectives and pronouns in a Devonshire dialect. In Peter Trudgill & J. K. Chambers (eds.), *Dialects of English: Studies in grammatical variation*, 20–28. London: Longman.
- Haspelmath, Martin. 1993. *A grammar of Lezgian*. Berlin: Mouton de Gruyter.

Bibliography

- Haspelmath, Martin. 2001. The European linguistic area: Standard Average European. In Martin Haspelmath, Ekkehard König, Wolfgang Oesterreicher & Wolfgang Raible (eds.), *Language typology and language universals/ Sprachtypologie und sprachliche Universalien/ La typologie des langues et les universaux linguistiques. An international handbook/ Ein internationales Handbuch/ Manuel international*, vol. 2, 1492–1510. Berlin/New York: de Gruyter.
- Hauser, Marc D., Noam Chomsky & Tecumseh Fitch. 2002. The faculty of language: What is it, who has it, and how did it evolve? *Science* 298. 1569–1579.
- Haviland, John. 1979. Guugu Yimidhirr. Sketch grammar. In Robert M.W. Dixon & Barry Blake (eds.), *Handbook of Australian languages*, vol. 1, 26–180. The Australian National University.
- Hawkins, John A. 1980. On implicational and distributional universals of word order. *Journal of Linguistics* 16(2). 193–235.
- Hawkins, John A. 1982. Cross-category harmony, X-bar and the predictions of markedness. *Journal of Linguistics* 18(1). 1–35.
- Hawkins, John A. & Gary Gilligan. 1988. Prefixing and suffixing universals in relation to basic word order. *Lingua* 74. 219–259.
- Heck, Fabian, Gereon Müller & Jochen Trommer. 2008. A phase-based approach to Scandinavian definiteness marking. In Charles B. Chang & Hannah J. Haynie (eds.), *Proceedings of the 26th West Coast Conference on Formal Linguistics*, 226–233. Sommerville (MA): Cascadia Proceedings Project.
- Heim, Irene & Angelika Kratzer. 1998. *Semantics in generative grammar*. Oxford: Blackwell.
- Helbig, Geshard & Joachim Buscha. 2001. *Deutsche Grammatik. ein Handbuch für den Ausländerunterricht*. Leipzig: Langenscheidt.
- Hewitt, B. George. 1989. *Abkhaz*. London: Routledge. First published in 1979 by North-Holland Publishing Company.
- Higginbotham, James. 1985. On semantics. *Linguistic Inquiry* 16(4). 547–598.
- Himmelman, Nikolaus P. 1997. *Deiktikon, Artikel, Nominalphrase: Zur Emergenz syntaktischer Struktur*. Tübingen: Niemeyer.
- Hinds, John. 1988. *Japanese*. London: Routledge. First published in 1986 by Croom Helm.
- Hinterwimmer, Stefan. to appear. A unified account of the properties of German demonstrative pronouns. In P. Grosz, I Heim, P. Patel & I. Yanovich (eds.), *Proceedings of pronoun workshop at NELS40*, Amherst (MA): GLSA Publications.
- Holes, Clive. 1990. *Gulf Arabic*. London: Croom Helm.
- Holton, Gary. 2014. Western Pantar. In Antoinette Schapper (ed.), *The Papuan languages of Timor, Alor and Pantar: Volume 1. Sketch grammars*, 23–95. Berlin: Mouton de Gruyter.

- Hualde, José Ignacio. 1992. *Catalan*. London: Routledge.
- Hurtado, Alfredo. 1985. The unagreement hypothesis. In L. King & C. Maley (eds.), *Selected papers from the thirteenth linguistic symposium on Romance languages*, 187–211. Amsterdam: John Benjamins.
- Huttar, George L. & Mary L. Huttar. 1994. *Ndyuka*. London: Routledge.
- Höhn, Georg. 2012a. The licensing of adnominal PPs: The case of Basque -ko. In Balázs Surányi & Diána Varga (eds.), *Proceedings of the First Central European Conference in Linguistics for postgraduate students*, 118–143. Budapest: Pázmány Péter Catholic University.
- Höhn, Georg. 2012b. *Unagreement is an illusion: The structure of the extended nominal projection and apparent agreement mismatches*. UCL MA thesis.
- Höhn, Georg F.K. 2014a. Contextually conditioned allomorphy and the Basque locative. Spelling out the Basque extended nominal projection. In Martin Kohlberger, Kate Bellamy & Eleanor Dutton (eds.), *ConSOLE XXI: Proceedings of the 21st Conference of the Student Organization of Linguistics in Europe (8-10 January 2013, Potsdam)*, 146–170. Leiden: Leiden University Centre for Linguistics.
- Höhn, Georg F.K. 2014b. The semantics of adnominal pronoun constructions and unagreement. In Ludmila Veselovská & Markéta Janebová (eds.), *Complex visibles out there. Proceedings of the Olomouc linguistics colloquium 2014: Language use and linguistic structure*, 175–191. Olomouc: Palacký University.
- Höhn, Georg F.K. 2015. Demonstratives and personal pronouns. In J.M.M. Brown & András Bárány (eds.), *Cambridge Occasional Papers in Linguistics (COPiL) volume 8: Proceedings of 'Interactions between syntax and semantics across frameworks'*, 84–105. Cambridge: University of Cambridge, Department of Theoretical and Applied Linguistics.
- Höhn, Georg F.K. 2016. Unagreement is an illusion: Apparent person mismatches and nominal structure. *Natural Language and Linguistic Theory* 34(2). 543–592. doi:10.1007/s11049-015-9311-y.
- Höhn, Georg F.K., Giuseppina Silvestri & M. Olimpia Squillaci. 2016. Unagreement between Italian and southern Italian dialects. *Rivista di Grammatica Generativa* 38. 137–147.
- Höhn, Georg F.K., Giuseppina Silvestri & M. Olimpia Squillaci. to appear. Greek and Romance unagreement in Calabria. *Journal of Greek Linguistics* .
- Inokuma, Sakumi. 2009. So-called pronoun-noun construction in Japanese: A new perspective on nominal syntax. *Linguistic Research* 25. 31–42.
- Jackendoff, Ray. 1977. *X-bar syntax: A study of phrase structure*. Cambridge (MA): MIT Press.
- Jaggar, Philip J. 2001. *Hausa*. Amsterdam, Philadelphia (PA): John Benjamins.
- Jelinek, Eloise. 1984. Empty categories, case and configurationality. *Natural Language and Linguistic Theory* 2. 39–76.
- Johannessen, Janne Bondi. 2008. The pronominal psychological demonstrative in Scandinavian: Its syntax, semantics and pragmatics. *Nordic Journal of Linguistics* 31(2). 161–192.

Bibliography

- Josefsson, Gunlög. 2006. Semantic and grammatical gender in Swedish—independent but interacting dimensions. *Lingua* 116. 1346–1368.
- Julien, Marit. 2002. *Syntactic heads and word formation*. Oxford: Oxford University Press.
- Julien, Marit. 2005. *Nominal phrases from a Scandinavian perspective*. Amsterdam: John Benjamins.
- Kahl, Tede. 2003. Aromanians in Greece: Minority or Vlach-speaking Greeks? In *Jahrbücher für Geschichte und Kultur Südosteuropas. History and culture of South Eastern Europe*, 205–219. Munich: Slavica Verlag Kovač.
- Kahl, Tede. 2005. Offene Fragen in der Erforschung des Aromunischen und seiner Dialekte. In Andrej N. Sobolev & A. Ju. Rusakov (eds.), *Языки и диалекты малых этнических групп на Балканах. Материалы международной научной конференции, Санкт-Петербург, 11-12 июня 2004 г.* [Languages and dialects of small ethnic groups on the Balkans. Materials of the scientific conference, Saint Petersburg, 11-12 June 2004], Saint Petersburg, Munich.
- Katsanis, Nikos & Konstantinos Ntinis. 1990. *Γραμματική της Κοινής Κουτσοβλαχικής* [Grammatiki tis Koinis Koutsovlachikis]. Thessaloniki: Archeio Koutsovlachikon Meleton.
- Kayne, Richard. 1994. *The antisymmetry of syntax* (Linguistic Inquiry Monograph 25). Cambridge (MA), London: MIT Press.
- Kayne, Richard. 2000. Notes on English agreement. In *Parameters and universals*, 187–205. Oxford University Press. Originally published as ?.
- Keesing, Roger M. 1985. *Kwaio grammar* (Pacific Linguistics 88). Canberra: The Australian National University.
- Kenesei, István, Robert M. Vago & Anna Fenyvesi. 1998. *Hungarian*. London: Routledge.
- Kilian-Hatz, Christa. 2008. *A grammar of modern Khwe*. Köln: Rüdiger Köppe.
- Kinn, Kari. 2015. *Null subjects in the history of Norwegian*. University of Oslo dissertation.
- Kiparsky, Paul. 1973. “Elsewhere” in phonology. In Stephen R. Anderson & Paul Kiparsky (eds.), *A Festschrift for Morris Halle*, 93–106. New York: Holt, Rinehart and Winston.
- Klamer, Marian. 2010. *A grammar of Teiwa*. Berlin: de Gruyter.
- Klamer, Marian. 2014. Kaera. In Antoinette Schapper (ed.), *The Papuan languages of Timor, Alor and Pantar: Volume 1. Sketch grammars*, 97–146. Berlin: Mouton de Gruyter.
- Kordić, Snežana. 1999. Personal- und Reflexivpronomina als Träger von Personalität. In Helmut Jachnow, Nina Mečkovskaja, Boris Norman & Bronislav Plotnikov (eds.), *Personalität und person*, 125–154. Wiesbaden: Harrassowitz.
- Kornfilt, Jaklin. 1997. *Turkish*. London: Routledge.
- Kramer, Ruth. 2009. *Definite markers, phi-features, and agreement: a morphosyntactic investigation of the Amharic DP*. UC Santa Cruz dissertation.

- Kramer, Ruth. 2012. A split analysis of plurality: evidence from Amharic. In N. Arnett & R. Bennett (eds.), *The proceedings of WCCFL 30*, 226–236. Somerville (MA): Cascadilla Press.
- Kramer, Ruth. 2014. Gender in Amharic: a morphosyntactic approach to natural and grammatical gender. *Language Sciences* 43. 102–115.
- Kratochvíl, František. 2014. Sawila. In Antoinette Schapper (ed.), *The Papuan languages of Timor, Alor and Pantar: Volume 1. Sketch grammars*, 351–438. Berlin: Mouton de Gruyter.
- Kuroda, S.-Y. 1965. *Generative grammatical studies in the Japanese language*. MIT dissertation.
- Kuroda, S.-Y. 1988. Whether we agree or not: A comparative syntax of English and Japanese. *Linguisticae Investigationes* 12. 1–47.
- Köhler, Oswin. 1989. *Die Welt der Kxoé-Buschleute im südlichen Afrika: Eine Selbstdarstellung in ihrer eigenen Sprache*, vol. Vol. 1: Die Kxoé-Buschleute und ihre ethnische Umgebung. Berlin: Dietrich Reimer Verlag.
- Lawrenz, Birgit. 1993. *Apposition. Begriffsbestimmung und syntaktischer Status*. Tübingen: Narr.
- Lebeaux, David. 2000. *Language acquisition and the form of the grammar*. Philadelphia: John Benjamins.
- Lecarme, Jacqueline. 2002. Gender “polarity”: Theoretical aspects of Somali nominal morphology. In Paul Boucher & Marc Plénat (eds.), *Many morphologies*, 109–141. Somerville (MA): Cascadilla Press.
- Ledgeway, Adam. 2013. Greek disguised as Romance? The case of Southern Italy. In Mark Janse, Brian Joseph, Angela Ralli & Metin Bagriacik (eds.), *Proceedings of the 5th international conference on Greek dialects and linguistic theory*, 184–227. Patras.
- Lekakou, Marika & Kriszta Szendrői. 2007. Eliding the noun in close apposition, or Greek polydefinites revisited. *UCL Working Papers in Linguistics* 19. 129–154.
- Lekakou, Marika & Kriszta Szendrői. 2012. Polydefinites in Greek: Ellipsis, close apposition and expletive determiners. *Journal of Linguistics* 48. 107–149.
- Li, Yen-Hui Audrey. 1998. Argument determiner and number phrases. *Linguistic Inquiry* 29. 693–702.
- Li, Yen-Hui Audrey. 1999a. Form and function correspondence: Structures and interpretation of nominal expressions in mandarin chinese. In Yukinori Takubo (ed.), *Comparative syntax of Japanese, Korean, Chinese and English (Report of the International Scientific Research Program)*, 147–186. Japan: Ministry of Education, Science and Culture.
- Li, Yen-Hui Audrey. 1999b. Plurality in a classifier language. *Journal of East Asian Linguistics* 8. 75–99.
- Li, Yen-Hui Audrey. 2007. Beyond empty categories. *Bulletin of the Chinese Linguistics Society of Japan* 254. 74–106.

Bibliography

- Li, Yen-Hui Audrey. 2014. Born empty. *Lingua* 151. 43–68.
- Lichtenberk, Frantisek. 2000. Inclusive pronominals. *Oceanic Linguistics* 39. 1–32.
- Link, Godehard. 1984. Hydras. On the logic of relative constructions with multiple heads. In Fred Landmann & Frank Veltman (eds.), *Varieties of formal semantics. Proceedings of the fourth Amsterdam Colloquium, September 1982*, 245–257. Dordrecht.
- Longobardi, Giuseppe. 1994. Reference and proper names: A theory of N-movement in syntax and logical form. *Linguistic Inquiry* 25(4). 609–665.
- Longobardi, Giuseppe. 2005. Toward a unified grammar of reference. *Zeitschrift für Sprachwissenschaft* 24. 5–44.
- Longobardi, Giuseppe. 2008. Reference to individuals, person, and the variety of mapping parameters. In Henrik Høeg Müller & Alex Klinge (eds.), *Essays on nominal determination: From morphology to discourse management*, 189–211. Philadelphia, Amsterdam: John Benjamins.
- Louagie, Dana & Jean-Christophe Verstraete. 2015. Personal pronouns with determining functions in Australian languages. *Studies in Language* 39(1). 159–198.
- Lowenstamm, Jean. 2008. On little n, $\sqrt{\quad}$, and types of nouns. In Jutta Hartmann, Veronika Hegedüs & Henk van Riemsdijk (eds.), *Sounds of silence: Empty elements in syntax and phonology*, 105–143. Amsterdam: Elsevier.
- Luján, Marta. 2002. Determiners as modified pronouns. *CÍRCULO de Lingüística Aplicada a la Comunicación (CLAC)* 9. 19–34. Also published as ?.
- Lyons, Christopher. 1999. *Definiteness*. Cambridge: Cambridge University Press.
- MacSwan, Jeff. 1998. The argument status of NPs in Southeast Puebla Nahuatl: Comments on the polysynthesis parameter. *Southwest Journal of Linguistics* 17(2). 101–114.
- Maho, Jouni F. 1998. *Few people, many tongues*. Windhoek: Gamsberg Macmillan.
- Mahootian, Shahrzad. 1997. *Persian*. London: Routledge.
- Mallinson, Graham. 1986. *Rumanian*. London: Croom Helm.
- Mancini, Simona, Nicola Molinaro, Luigi Rizzi & Manuel Carreiras. 2011. When persons disagree: An ERP study of unagreement in Spanish. *Psychophysiology* 48. 1361–1371.
- Marantz, Alec. 1988. Clitics, morphological merger and the mapping to phonological structure. In M. Hammond & M. Noonan (eds.), *Theoretical morphology*, 253–270. San Diego: Academic Press.
- Marantz, Alec. 1991. Case and licensing. In Germán F. Westphal, Benjamin Ao & Hee-Rahk Chae (eds.), *Proceedings of the eighth eastern states conference on linguistics (escol '91)*, 234–253. Baltimore: University of Maryland.

- Marantz, Alec. 1997. No escape from syntax: Don't try morphological analysis in the privacy of your own lexicon. In Alexis Dimitriadis, Laura Siegel, Clarissa Surek-Clark & Alexander Williams (eds.), *Proceedings of the 21st Annual Penn Linguistics Colloquium*, vol. 4 (U.Penn Working Papers in Linguistics 2), 201–225. Philadelphia: University of Pennsylvania.
- Marantz, Alec. 2009. Phases and words. Unpublished ms., NYU.
- McBride, Sam & Nancy McBride. 1972. *Gimi grammar essentials*. Ukarumpa, PNG: Summer Institute of Linguistics. Typescript (66pp).
- McCarthy, John J. & Alan Prince. 1994. The emergence of the unmarked: Optimality in prosodic morphology. In *Papers from the annual meeting of the North East Linguistic Society* 24, 333–379.
- McCloskey, James. 2004. Irish nominal syntax 1: Demonstratives. Ms., UC Santa Cruz.
- McFadden, Thomas. 2004. *The position of morphological case in the derivation: A study on the syntax-morphology interface*. University of Pennsylvania dissertation.
- McGregor, William B. 2009. Typology of ergativity. *Language and Linguistics Compass* 3(1). 480–508.
- Meinardus, Ronald. 2002. Muslims: Turks, Pomaks and Gypsies. In Richard Clogg (ed.), *Minorities in Greece*, chap. 5, 81–93. London: Hurst & Company.
- Merlan, Francesca. 1989. *Mangarayi*. London: Croom Helm. Reprint of 1982 North-Holland Publishing edition.
- Miletić, Ljubomir. 1903. *Das Ostbulgarische* (Kaiserliche Akademie der Wissenschaften, Schriften der Balkancommission, Linguistische Abtheilung 2). Wien: Alfred Hölder.
- Miletić, Ljubomir. 1912. *Die Rhodopemundarten der bulgarischen Sprache* (Kaiserliche Akademie der Wissenschaften, Schriften der Balkankommission, Linguistische Abteilung 10). Wien: Alfred Hölder.
- Mladenova, Olga M. 2007. *Definiteness in Bulgarian. Modelling the processes of language change*. Berlin: Mouton de Gruyter.
- Mpiranya, Fidèle. 2015. *Swahili grammar and workbook*. New York: Routledge.
- Müller, Stefan. 2008. *Head-Driven Phrase Structure Grammar. Eine Einführung*. Tübingen: Stauffenburg Verlag.
- Næss, Åshild & Even Hovdhaugen. 2011. *A grammar of Vaeakau-Taumako*. Berlin: Mouton de Gruyter.
- Nash, Léa. to appear. Person split and pronominal asymmetries. In *Proceedings of nels*, .
- Nedjalkov, Igor. 1997. *Evenki*. London: Routledge.
- Neeleman, Ad & Kriszta Szendrői. 2007. Radical pro drop and the morphology of pronouns. *Linguistic Inquiry* 38. 671–714.

Bibliography

- Neeleman, Ad & Hans van de Koot. 2010. Theoretical validity and psychological reality of the grammatical code. In M. Everaert, T. Lentz, H. de Mulder, Ø. Nilsen & A. Zondervan (eds.), *The linguistics enterprise: From knowledge of language to knowledge in linguistics*, 183–212. Amsterdam: John Benjamins.
- Nevins, Andrew. 2007. The representation of third person and its consequences for person-case effects. *Natural Language & Linguistic Theory* 25(2). pp. 273–313.
- Nevins, Andrew. 2011. Multiple agree with clitics: person complementarity vs. omnivorous number. *Natural Language & Linguistic Theory* 29. 939–971.
- Newman, Paul. 2000. *The Hausa language. An encyclopedic reference grammar*. New Haven, London: Yale University Press.
- Newton, Brian. 1964. An Arabic-Greek dialect. *Word* 20(3). 43–52.
- Nicolae, Alexandru. 2015. The parameter of definiteness in Romanian: Diachronic and synchronic evidence. In Virginia Hill (ed.), *Formal approaches to DP in Old Romanian*, 17–61. Leiden: Brill.
- Noguchi, Tohru. 1997. Two types of pronouns and variable binding. *Language* 73. 770–797.
- Norman, Boris. 2001. Субстантивное подлежащее при глаголах в 1-м лице множественного числа в болгарском языке (Двама студенти търсим работа) [substantivnoe podležaščee pri glagolax v 1-m lice množestvennogo čisla v bol'garskom jazyke (*Dvama studenti tərsim rabota*)]. In Alexander Kiklevič (ed.), *Количественность и градуальность. Quantität und Graduierung in der natürlichen Sprache* (Die Welt der Slaven 11), 77–86. München: Otto Sagner.
- Noyer, Rolf. 1997. *Features, positions and affixes in autonomous morphological structure*. New York: Garland. Revised version of 1992 MIT Doctoral Dissertation.
- Obata, Kazuko. 2003. *A grammar of Bilua. A Papuan language of the Solomon Islands* (Pacific Linguistics 540). Canberra: The Australian National University.
- Olarrea, Antxon. 1994. Notes on the optimality of agreement. Unpublished ms., University of Washington.
- Olsen, Susan. 1991. Die deutsche Nominalphrase als Determinansphrase. In *DET, COMP und INFL: Zur Syntax funktionaler Kategorien und grammatischer Funktionen*, 35–56. Tübingen: Niemeyer.
- Ordóñez, Francisco. 2000. *The clausal structure of Spanish: a comparative study*. New York, London: Garland.
- Ordóñez, Francisco & Esthela Treviño. 1999. Left dislocated subjects and the pro-drop parameter: A case study of Spanish. *Lingua* 107. 39–68.
- Osenova, Petya. 2003. On subject-verb agreement in Bulgarian (an HPSG-based account). In Peter Kosta, Joanna Błaszczak, Jens Frasek, Ljudmila Geist & Marzena Żygis (eds.), *Investigations into formal Slavic linguistics. Contributions of the fourth European conference on formal description of Slavic languages – FDSL IV*, 661–672. Frankfurt/Main: Peter Lang.

- Panagiotidis, Phoevos. 2000. Demonstrative determiners and operators: The case of MG. *Lingua* 110. 717–742.
- Panagiotidis, Phoevos. 2002. *Pronouns, clitics and empty nouns*. Amsterdam: John Benjamins.
- Panagiotidis, Phoevos. 2003a. One, empty nouns, and θ -assignment. *Linguistic Inquiry* 34(2). 281–292.
- Panagiotidis, Phoevos. 2003b. Empty nouns. *Natural Language and Linguistic Theory* 21. 381–432.
- Panagiotidis, Phoevos. 2011. Categorical features and categorizers. *The Linguistic Review* 28. 365–386.
- Panagiotidis, Phoevos. 2015. *Categorical features. A generative theory of word class categories*. Cambridge: Cambridge University Press.
- Panayidou, Fryni. 2013. *(In)flexibility in adjective ordering*. Queen Mary, University of London dissertation.
- Pandharipande, Raeshwari V. 1997. *Marathi*. London: Routledge.
- Papadimitriou, Panagiotis. 2008. Τα Πομάκικα. Συγχρονική περιγραφή μιας νότιας τοπικής ποικιλίας της Αναλυτικής Σλαβικής από τη Μύκη του Νομού Ξάνθης [Ta pomakika. Sygxroniki perigrafi mias notias topikis poikilias tis Analytikis Slavikis apo ti Myki tou Nomou Ksanthis]. Thessaloniki: Adelfon Kyriakidi.
- Papangeli, Dimitra. 2000. Clitic doubling in Modern Greek: a head-complement relation. In Corinne Iten & Ad Neeleman (eds.), *UCL Working Papers in Linguistics*, vol. 12, 473–497. London: University College London.
- Parrott, Jeffrey K. 2009. Danish vestigial case and the acquisition of vocabulary in distributed morphology. *Biolinguistics* 3(2-3). 270–304.
- Patel-Grosz, Pritty & Patrick Grosz. 2010. On the typology of donkeys: Two types of anaphora resolution. In Martin Prinzhorn, Viola Schmitt & Sarah Zobel (eds.), *Proceedings of Sinn und Bedeutung 14, Vienna*, 339–355. <http://www.univie.ac.at/sub14/proc/patel-grosz.pdf>.
- Patz, Elisabeth. 2002. *A grammar of the Kuku Yalanji language of North Queensland* (Pacific Linguistics 527). Canberra: The Australian National University.
- Payne, A.M. & D.E. Drew. 1970. Kamano grammar sketch. Typescript (102pp).
- Payne, Audrey & Dorothy E. Drew. 1970/2009. Kamano grammar sketch. Manuscript (74p.) dated 1970, available online 2009 on http://www-01.sil.org/pacific/png/pubs/928474531295/Kamano_Grammar.pdf, accessed 22 July 2015.
- Pereltsvaig, Asya. 2006. Head movement in Hebrew nominals: A reply to Shlonsky. *Lingua* 116. A1–A40.
- Pesetsky, David. 1978. Category switching and so-called so-called pronouns. In Donka Farkas, Wesley M. Jacobsen & Karol W. Todrys (eds.), *Chicago linguistic society*, vol. 14, 350–360. Chicago.

Bibliography

- Piper, Predrag. 1998. Проспект српске синтаксе у светлу словенске синтаксичке типологије (prospekt srpske sintakse u svetlu slovenske sintaksičke tipologije). *Славистика (Slavistika)* 2. 22–29.
- Popov, K. 1988. *Sintaktičnoto sǝglasuvanje v bǝlgarskija jezik*. Sofia.
- Postal, Paul. 1969. On so-called “pronouns” in English. In David A. Reibel & Sanford A. Schane (eds.), *Modern studies in English: Readings in Transformational Grammar*, 201–226. Englewood Cliffs (New Jersey): Prentice Hall.
- Progovac, Liljana. 1998. Determiner phrase in a language without determiners. *Journal of Linguistics* 34. 164–179.
- Pylkkänen, Liina. 2008. *Introducing arguments*. Cambridge (MA): MIT Press.
- R Core Team. 2013. *R: A language and environment for statistical computing*. R Foundation for Statistical Computing Vienna, Austria. <http://www.R-project.org/>.
- Radford, Andrew. 1993. Head-hunting: On the trail of the nominal Janus. In Greville G. Corbett, Norman M. Fraser & Scott McGlashan (eds.), *Heads in grammatical theory*, 73–113. Cambridge: Cambridge University Press.
- Radkevich, Nina V. 2010. *On location: the structure of case and adpositions*. University of Connecticut dissertation.
- Rauh, Gisa. 2003. Warum wir Linguisten “euch Linguisten”, aber nicht “sie Linguisten” akzeptieren können. Eine personendeiktische Erklärung. *Linguistische Berichte* 196. 390–424.
- Rauh, Gisa. 2004. Warum ‘Linguist’ in ‘ich/du Linguist’ kein Schimpfwort sein muß. Eine konversationstheoretische Erklärung. *Linguistische Berichte* 197. 77–105.
- Reece, Laurie. 1970. *Grammar of the Wailbri language of central Australia* (Oceania Linguistic Monographs 13). Sydney: University of Sydney, Australia.
- Reesink, Ger P. 1987. *Structures and their functions in Usan. A Papuan language of Papua New Guinea*. Amsterdam: John Benjamins.
- Renck, G. L. 1975. *A grammar of Yagaria*, vol. 40 Pacific Linguistics. Canberra: Australian National University.
- Rennison, John R. 1997. *Koromfe*. London: Routledge.
- Richards, Marc. 2008. Defective agree, case alternations, and the prominence of person. In March Richards & Andrej L. Malchukov (eds.), *Scales* 86, 137–161. Leipzig: Universität Leipzig.
- Ritter, Elizabeth. 1995. On the syntactic category of pronouns and agreement. *Natural Language and Linguistic Theory* 13. 405–443.
- Ritter, Elizabeth & Martina Wiltschko. 2009. Varieties of INFL: TENSE, LOCATION, and PERSON. In Jeroen van Craenenbroeck (ed.), *Alternatives to cartography* Studies in Generative Grammar, 153–202. Berlin, New York: de Gruyter.

- Ritter, Elizabeth & Martina Wiltschko. 2014. The composition of INFL: An exploration of *tense*, *tenseless* languages, and *tenseless* constructions. *Natural Language and Linguistic Theory* 32. 1331–1386.
- Rivero, María Luisa. 2008. Oblique subjects and person restrictions in Spanish: A morphological approach. In R. D’Alessandro, S. Fischer & G.H. Hrafnbjargarson (eds.), *Agreement restrictions*, 215–250. Berlin: Mouton de Gruyter.
- Rizzi, Luigi. 1982. Negation, wh-movement and the null subject parameter. In *Issues in Italian Syntax*, chap. 4, 117–184. Dordrecht: Forris.
- Rizzi, Luigi. 1986. Null objects in Italian and the theory of *pro*. *Linguistic Inquiry* 17. 501–557.
- Roberts, Ian. 2007. *Diachronic syntax*. Oxford: Oxford University Press.
- Roberts, Ian. 2010a. *Agreement and head movement: Clitics, incorporation, and defective goals*. Cambridge (MA): MIT Press.
- Roberts, Ian. 2010b. Varieties of French and the null subject parameter. In Theresa Biberauer, Anders Holmberg, Ian Roberts & Michelle Sheehan (eds.), *Parametric variation: Null subjects in minimalist theory*, 303–327. Cambridge: Cambridge University Press.
- Roberts, Ian. 2012. On the nature of syntactic parameters: a programme for research. In Charlotte Galves, Sonia Cyrino, Ruth Lopes, Filomena Sandalo & Juanito Avelar (eds.), *Parameter theory and linguistic change*, 319–334. Oxford: Oxford University Press.
- Roberts, Ian & Anders Holmberg. 2010. Introduction: parameters in minimalist theory. In Theresa Biberauer, Anders Holmberg, Ian Roberts & Michelle Sheehan (eds.), *Null subjects in minimalist theory*, 1–57. Cambridge: Cambridge University Press.
- Roberts, Ian & Anna Roussou. 2003. *Syntactic change. A minimalist approach to grammaticalization*. Cambridge: Cambridge University Press.
- Roberts, John R. 1987. *Amele*. London: Croom Helm.
- Robinson, Laura C. & John W. Haan. 2014. Adang. In Antoinette Schapper (ed.), *The Papuan languages of Timor, Alor and Pantar: Volume 1. Sketch grammars*, 221–283. Berlin: Mouton de Gruyter.
- Rodrigues, Cilene. 2008. Agreement and floatation in partial and inverse partial control configurations. In William D. Davies & Stanley Dubinsky (eds.), *New horizons in the analysis of control and raising*, 213–229. Dordrecht: Springer.
- Roehrs, Dorian. 2005. Pronouns are determiners after all. In Marcel den Dikken & Christina M. Tortora (eds.), *The function of function words and functional categories*, 251–285. Amsterdam: John Benjamins.
- Ross, J. R. 1970. On declarative sentences. In *Readings in English transformational grammar*, 222–272. Waltham (MA): Ginn.
- Round, Erich. 2003. Case marking in Kalaw Lagaw Ya: not as bizarre as we thought. In *Camling proceedings 1*, 161–167. Cambridge.

Bibliography

- Rubin, Edward J. 2002. The structure of modifiers. Draft version of a book to appear with Oxford University Press. First five chapters available at <http://lrc.hum.utah.edu/linguistics/Faculty/Rubin/>, accessed 7 January 2017.
- Rust, Friederich. 1965. *Praktische Namagrammatik*. Cape Town: A.A. Balkema.
- Rutkowski, Pawel. 2002. Noun/pronoun asymmetries: evidence in support of the dp hypothesis in polish. *Jezikoslovlje* 3(1–2). 159–170.
- Saab, Andrés. 2013. Anticoncordancia y sincretismo en Español. Unagreement and syncretism in Spanish. *Lingüística* 29(2). 191–229.
- Saab, Andrés Leandro. 2007. Anti-agreement effects and null subjects in Spanish: A distributed morphology approach. Handout from IV Encuentro de Gramática Generative, Mendoza, Argentina, July 26–28 2007.
- Saito, Mamoru. 2007. Notes on East Asian argument ellipsis. *Language Research* 43. 203–227.
- Saltarelli, Mario. 1988. *Basque*. London: Croom Helm.
- Schapper, Antoinette. 2014. Kamang. In Antoinette Schapper (ed.), *The Papuan languages of Timor, Alor and Pantar: Volume 1. Sketch grammars*, 285–349. Berlin: Mouton de Gruyter.
- Schapper, Antoinette & Rachel Hendery. 2014. Wersing. In Antoinette Schapper (ed.), *The Papuan languages of Timor, Alor and Pantar: Volume 1. Sketch grammars*, 439–503. Berlin: Mouton de Gruyter.
- Schaub, Willi. 1985. *Babungo*. London: Croom Helm.
- Schoorlemmer, Erik. 2012. Definiteness marking in Germanic: morphological variation on the same syntactic theme. *The Journal of Comparative Germanic Linguistics* 15(2). 107–156.
- Scott, Graham. 1978. *The Fore language of Papua New Guinea*. Canberra: The Australian National University.
- Seiler, Walter. 1985. *Imonda, a Papuan language* (Pacific Linguistics 93). Canberra: The Australian National University.
- Sheehan, Michelle. 2014. Towards a parameter hierarchy for alignment. In Robert E. Santana-LaBarge (ed.), *Proceedings of WCCFL 31*, 399–408. Somerville (MA): Cascadia Proceedings Project.
- Sheehan, Michelle L. 2013. Some implications of a copy theory of labeling. *Syntax* 16(4). 362–396.
- Shlonsky, Ur. 2004. The form of Semitic noun phrases. *Lingua* 114. 1465–1526.
- Shlonsky, Ur. 2009. Hebrew as a partial null subject language. *Studia Linguistica* 63(1). 1–25.
- Shlonsky, Ur. 2014. Referential third person null subjects in Hebrew. *Brill's Annual of Afroasiatic Languages and Linguistics* 6. 27–44.

- Siddiqi, Daniel. 2010. Distributed morphology. *Language and Linguistics Compass* 4(7). 524–542.
- Siewierska, A. 2004. *Person*. Cambridge: Cambridge University Press.
- Siewierska, Anna. 1998. On nominal and verbal person marking. *Linguistic Typology* 2. 1–55.
- Sigurðsson, Haldór. 2004. The syntax of person, tense, and speech features. *Rivista di Linguistica* 16(1). 219–251.
- Simpson, Jane. 1991. *Warlpiri morpho-syntax. A lexicalist approach*. Dordrecht: Kluwer.
- Sneddon, James Neil. 1996. *Indonesian. A comprehensive grammar*. London: Routledge.
- Sohn, Ho-Min. 1994. *Korean*. London: Routledge.
- Sommerstein, Alan H. 1972. On the so-called definite article in English. *Linguistic Inquiry* 3. 197–209.
- Sportiche, Dominique. 1996. Clitic constructions. In Johan Rooryck & Laurie Zaring (eds.), *Phrase structure and the lexicon*, 213–276. London/New York: Routledge.
- Sportiche, Dominique. 1999. Subject clitics in French and Romance complex inversion and clitic doubling. In Kyle Johnson & Ian Roberts (eds.), *Beyond principles and parameters: Essays in memory of Osvaldo Jaeggli*, 189–221. Dordrecht: Springer.
- Squillaci, M. Olimpia. 2016. *When Greek meets Romance: A morphosyntactic investigation of language contact in Aspromonte*. University of Cambridge dissertation.
- Sridhar, S. N. 1990. *Kannada*. London: Routledge.
- Stavrou, Melita. 1990-1991. Ονοματική παράθεση και επεξήγηση: μια ερμηνευτική προσέγγιση και προσδιορισμός των σχετικών φαινομένων [Onomatiki parathesi kai epexigisi: mia ermineftiki prosengisi kai prosdiorismos ton sxetikon fenomenon]. *Glossologia* 9-10. 113–150.
- Stavrou, Melita. 1995. Epexegetis vs. apposition in Modern Greek. In *Scientific bulletin of the School of Philology*, vol. 5, 217–250. Thessaloniki: Aristotle University.
- Stirling, Lesley. 2008. “Double reference” in Kala Lagaw Ya narratives. In Ilana Mushin & Brett Baker (eds.), *Discourse and grammar in Australian languages*, 167–202. Amsterdam: John Benjamins.
- Stirling, Lesley & Brett Baker. 2007. Pronominal apposition and the status of ‘determiner’ in Australian languages. Handout from Workshop on Definiteness & Referentiality, Australian Linguistic Conference, Adelaide, 28-30 September 2007.
- Stojanov, St. 1964. *Gramatika na bəlgarskija knižoven jezik. Fonetika i morfologija*. Sofia.
- Stowell, Tim. 1991. Determiners in NP and DP. In Katherine Leffel & Denis Bouchard (eds.), *Views on phrase structure*, 37–56. Dordrecht: Kluwer.
- Sulkala, Helena & Merja Karjalainen. 1992. *Finnish*. London: Routledge.

Bibliography

- Suñer, Margarita. 1988. The role of agreement in clitic-doubled constructions. *Natural Language and Linguistic Theory* 6(3). 391–434.
- Svenonius, Peter. 2008. Projections of P. In Anna Asbury, Jakub Dotlačil & Berit Gehrke (eds.), *Syntax and semantics of spatial P*, 63–84. Amsterdam: John Benjamins.
- Svenonius, Peter. 2012. Spanning. Ms. University of Tromsø, available at <http://ling.auf.net/lingBuzz/001501>, last accessed 7 January 2017.
- Szabolcsi, Anna. 1994. The noun phrase. In Ferenc Kiefer & Katalin É. Kiss (eds.), *The syntactic structure of Hungarian* (Syntax and Semantics 27), 179–275. Academic Press.
- Tallerman, Maggie. 2009. Phrase structure vs. dependency: The analysis of Welsh syntactic soft mutation. *Journal of Linguistics* 45. 167–201.
- Taraldsen, Knut Tarald. 1995. On agreement and nominative objects in Icelandic. In Hubert Haider, Susan Olsen & Sten Vikner (eds.), *Studies in Comparative Germanic Syntax*, 307–327. Dordrecht: Kluwer.
- Tayebwa, Daphine Doreen. 2014. *Demonstrative determiners in Runyakore-Rukiga*. Trondheim Norwegian University of Science and Technology MA thesis. Available at www.diva-portal.org/smash/get/diva2:743912/FULLTEXT01.pdf, last accessed 7 January 2017.
- Taylor, Charles. 1985. *Nkore-Kiga*. London: Croom Helm.
- Terrill, Angela. 2003. *A grammar of Lavukaleve*. Berlin: Mouton de Gruyter.
- Terrill, Angela. 2011. Languages in contact: An exploration of stability and change in the Solomon Islands. *Oceanic Linguistics* 50(2). 312–337.
- Tomioka, S. 2003. The semantics of Japanese null pronouns and its cross-linguistic implications. In K. Schwabe & S. Winkler (eds.), *The interfaces: Deriving and interpreting omitted structures*, 321–339. Amsterdam: John Benjamins.
- Tomić, Olga Mišeska. 2012. *A grammar of Macedonian*. Bloomington, Indiana: Slavica.
- Topolinjska, Zuzanna. 1995. *Makedonskite dijalekti vo egejska makedonija. Book 1: Sintaksa. Tom 1: Mehanizmi na predikacija. 1.1: Konstrukcii so glagolagol predikati*. Skopje: Makedonska akademija na naukite i umetnostite.
- Torrego, Esther. 1996. On quantifier float in control clauses. *Linguistic Inquiry* 27. 111–126.
- Trask, R.L. 2003. The noun phrase: nouns, determiners and modifiers; pronouns and names. In José Ignacio Hualde & Jon Ortiz de Urbina (eds.), *A grammar of Basque*, 113–170. Berlin, New York: Mouton de Gruyter.
- Treis, Yvonne. 2008. *A grammar of Kambaata (Ethiopia). Part 1: Phonology, nominal morphology, and non-verbal predication*. Köln: Rüdiger Köppe.
- Tsiapera, Maria. 1969. *A descriptive analysis of Cypriot Maronite Arabic*. The Hague: Mouton.
- Uriagereka, Juan. 1995. Aspects of the syntax of clitic placement in western Romance. *Linguistic Inquiry* 26. 79–124.

- van Riemsdijk, Henk. 1999. Categorical feature magnetism: The endocentricity and distribution of projections. *Journal of Comparative Germanic Linguistics* 2. 1–48.
- Vergnaud, J.-R. & M. L. Zubizarreta. 1992. The definite determiner and the inalienable constructions in french and in english. *Linguistic Inquiry* 23. 595–652.
- Villa-García, Julio. 2010. To agree or not to agree: Beyond quintessentially syntactic agreement in Spanish. In S. Colina, A. Olarrea & A. M. Carvalho (eds.), *Romance linguistics 2009: Selected papers from the 30th Linguistics Symposium on Romance Languages (LSRL), Tucson, Arizona, March 2009*, 249–266. Amsterdam, Philadelphia: John Benjamins.
- von Prince, Kilu. 2008. Attributive linkers in three languages. TU Berlin, MA thesis.
- Vossen, Rainer (ed.). 2013. *The Khoesan languages*. London: Routledge.
- Wali, Kashi & Omkar N. Koul. 1997. *Kashmiri*. London: Routledge.
- Weissenborn, Jürgen & Wolfgang Klein (eds.). 1982. *Here and There: Cross-linguistic studies on deixis and demonstration*. Amsterdam: John Benjamins.
- Williams, Edwin. 1994. Remarks on lexical knowledge. *Lingua* 92. 7–34.
- Willim, Ewa. 2000. On the grammar of Polish nominals. In Roger Martin, David Michaels & Juan Uriagereka (eds.), *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*, 319–343. Cambridge (MA): MIT Press.
- Willis, David. 2006. Against n-raising and np-raising analyses of welsh noun phrases. *Lingua* 116. 1807–1839.
- Wiltschko, Martina. 1998. On the syntax and semantics of (relative) pronouns and determiners. *Journal of Comparative Germanic Linguistics* 2. 143–181.
- Wiltschko, Martina. 2008. The syntax of non-inflectional plural marking. *Natural Language & Linguistic Theory* 26. 639–694.
- Wiltschko, Martina. 2011. Nominal licensing via case or deictic anchoring. In Lisa Armstrong (ed.), *Proceedings of the 2011 annual conference of the Canadian Linguistic Association*, Canadian Linguistic Association.
- Wiltschko, Martina. 2014. *The universal structure of categories. Towards a formal typology*. Cambridge: Cambridge University Press.
- Winnifrith, T. J. 2002. Vlachs. In Richard Clogg (ed.), *Minorities in Greece*, chap. 7, 112–121. London: Hurst & Company.
- Wurmbrand, Susi. to appear. Formal and semantic agreement in syntax: A dual feature approach. In *Proceedings of the Olomouc Linguistics Colloquium 2016: Language use and linguistic structure*, Olomouc: Palacký University.
- Zribri-Hertz, Anne. 1994. La syntaxe des clitques nominatifs en français standard et en français avancé. In Georges Kleiber & Gilles Roques (eds.), *Travaux de linguistique et de philologie*, 131–147. Strasbourg/Nancy: Klincksieck.

